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CRPL-F 231 PART A

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PART A  
IONOSPHERIC DATA

ISSUED  
NOVEMBER 1963

U. S. DEPARTMENT OF COMMERCE  
NATIONAL BUREAU OF STANDARDS  
CENTRAL RADIO PROPAGATION LABORATORY  
BOULDER, COLORADO



## IONOSPHERIC DATA

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## IONOSPHERIC DATA

The CRPL-F series bulletins are issued as part of the responsibility of the Central Radio Propagation Laboratory for the exchange and distribution of ionospheric and related geophysical data. Part A, "Ionospheric Data," and Part B, "Solar-Geophysical Data," of the CRPL-F series present a variety of data in convenient form for use in research in radio propagation and the ionosphere and in other geophysical problems.

The current form of the tables of ionospheric data provides the monthly medians and, in addition, the number of values entering into the median determination (count) for all ionospheric characteristics listed. Also, when available, the upper and lower quartile values indicated by UQ and LQ in the tables, are listed for  $f_oF_2$ ,  $h'F_2$ ,  $h'F$ , and  $M(3000)F_2$ . Quartile values are not listed for the other characteristics because of space limitations. The tables are prepared by IBM machine methods.

Beginning with CRPL-F221, Part A, "Ionospheric Data," the hourly median values for the graphs of critical frequencies and  $M(3000)F_2$  were plotted by machine methods instead of manually, as in earlier issues. Graphs of critical frequencies and  $M(3000)F_2$  will continue to appear. Graphs of percentage of time of occurrence for fEs and virtual heights of the regular ionospheric layers are no longer included. Data on percentage of time of occurrence of fEs above 3, 5, and 7 Mc are available from the CRPL and the IGY World Data Center for Airglow and Ionosphere.

For many years, the tables of ionospheric data appearing in the F series, Part A, listed values of medians recomputed at CRPL. While this practice enforced a certain uniformity, it was subject to some valid criticism for tampering with the original data. The tables and graphs now show the ionospheric data as they are provided by the originating laboratory. Responsibility for the accuracy and reliability of the data rests entirely with the originator.

Medians of data for the U.S. stations are computed in accordance with the recommendations of the World-Wide Soundings Committee. Data will appear in the F series, Part A, only when the complete daily-hourly tabulations have been received by the CRPL or the IGY World Data Center A for Airglow and Ionosphere.

Information on symbols, terminology, and conventions may be found in the "URSI Handbook of Ionogram Interpretation and Reduction, of the World-Wide Soundings Committee," edited by W. R. Piggott and K. Rawer (Elsevier, 1961), which supersedes previous documents. A list of symbols is available from CRPL on request.

The following table contains the latest available information on smoothed observed Zurich sunspot numbers, beginning with the minimum of April 1954. Final numbers are listed through June 1962, the succeeding values being based on provisional data.

Smoothed Observed Zurich Sunspot Number

Month	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1954				3	4	4	5	7	8	8	10	12
1955	14	16	19	23	29	35	40	46	55	64	73	81
1956	89	98	109	119	127	137	146	150	151	156	160	164
1957	170	172	174	181	186	188	191	194	197	200	201	200
1958	199	201	201	197	191	187	185	185	184	182	181	180
1959	179	177	174	169	165	161	156	151	146	141	137	132
1960	129	125	122	120	117	114	109	102	98	93	88	84
1961	80	75	69	64	60	56	53	52	52	51	50	49
1962	45	42	40	39	39	38	36	34	32	31	30	30
1963	29	30	30	29								

Units of Ionospheric Data Tables

foF2, foEs - - - Tenths of a megacycle  
 foF1, foE - - - Hundredths of a megacycle  
 h'F2, h'F, h'E - Kilometers  
 (M3000)F2 - - - Hundredths

NOTE: Occasionally, when the median falls between two of the observed values, the median is carried an extra decimal place beyond these units. Those cases are easily identifiable by the extra digit appearing to the right of the number, in a column usually left blank.

MED - Median  
 CNT - Count  
 UQ - Upper Quartile  
 LQ - Lower Quartile



## WORLD - WIDE SOURCES OF IONOSPHERIC DATA

THE IONOSPHERIC DATA GIVEN IN TABLES 1 TO 100 AND FIGURES 1 TO 100 WERE ASSEMBLED BY THE CENTRAL RADIO PROPAGATION LABORATORY FOR ANALYSIS, CORRELATION AND DISTRIBUTION. THE FOLLOWING ARE THE SOURCES OF THE DATA IN THIS ISSUE.

COMMONWEALTH OF AUSTRALIA, IONOSPHERIC PREDICTION SERVICE OF  
THE COMMONWEALTH OBSERVATORY,  
HOBART, TASMANIA  
TOWNSVILLE, AUSTRALIA

DANISH NATIONAL COMMITTEE OF URSI.  
GODHAVN, GREENLAND  
NARSSARSSUAQ, GREENLAND

ICELANDIC POST AND TELEGRAPH ADMINISTRATION.  
REYKJAVIK, ICELAND

INDIAN COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH,  
RADIO RESEARCH COMMITTEE, NEW DELHI, INDIA.  
AHMEDABAD, INDIA (PHYSICAL RESEARCH LABORATORY)  
KODAIKANAL, INDIA (INDIA METEOROLOGICAL DEPARTMENT)

THE ROYAL NETHERLANDS METEOROLOGICAL INSTITUTE.  
PARAMARIBO, SURINAM

MANILA OBSERVATORY, PHILIPPINES.  
BAGUIO, LUZON

RESEARCH INSTITUTE OF NATIONAL DEFENCE, STOCKHOLM, SWEDEN.  
KIRUNA, SWEDEN  
UPPSALA, SWEDEN

UNITED STATES ARMY SIGNAL CORPS., UNITED STATES OF AMERICA.  
ADAK, ALASKA  
FT. MONMOUTH, NEW JERSEY  
GRAND BAHAMA I.  
OKINAWA I.  
THULE, GREENLAND  
WHITE SANDS, NEW MEXICO

NATIONAL BUREAU OF STANDARDS, UNITED STATES OF AMERICA.  
(CENTRAL RADIO PROPAGATION LABORATORY).  
BARROW, ALASKA  
BYRD STATION, ANTARCTICA  
COLLEGE (FAIRBANKS), ALASKA (GEOPHY INST OF UNIV OF ALASKA)  
HUANCAYO, PERU (INSTITUTO GEOFISICO DEL PERU)  
MAUI, HAWAII  
POLE STATION, ANTARCTICA  
TALARA, PERU (INSTITUTO GEOFISICO DEL PERU)  
WASHINGTON, D.C.

## ERRATUM

CRPL-F229, P. 5, TABLE 17: THE CORRECT VALUES OF HEIGHTS FOR  
WHITE SANDS, NOVEMBER 1961, ARE 10 PERCENT LOWER THAN WERE REPORTED.

# TABLES OF IONOSPHERIC DATA

August 1963 - April 1963

TABLE 1  
(13h-4h, 120-6E)

BAGUIO, LUZON		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
HOUR		U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
foF2	MED	56	48	46	43	40	43	38	31	25	20	29	31	31	31	31	31	31	31	31	31	31	31	31	31
	CNT	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	UQ	60	56	49	46	48	45	50	64	70	77	80	90	92	94	97	102	106	113	115	102	84	74	66	56
	LQ	46	40	44	36	36	36	46	56	60	64	72	77	74	83	86	89	94	96	93	90	66	58	40	
h'F2	MED	250	325	380	400	405	405	405	400	380	340	300													
	CNT	13	14	19	26	29	31	31	28	28	28	28													
	UQ																								
	LQ																								
h'F	MED	330	310	260	270	250	230	240	215	200	190	185	185	196	196	300	300	310	225	250	225	235	260	305	345
	CNT	30	19	21	19	12	10	31	26	22	15	17	16	14	19	17	13	14	13	28	31	31	28	23	23
	UQ																								
	LQ																								
M3000F2	MED	280	295	310	330	325	370	345	350	330	285	260	245	265	250	255	265	275	305	320	325	325	305	295	280
	CNT	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	UQ	325	340	330	335	330	370	365	360	335	300	275	265	265	265	265	275	290	315	335	340	345	320	300	300
	LQ	275	285	300	305	325	370	335	335	310	260	245	235	235	230	240	250	260	285	305	305	300	290	285	270
foF1	MED																								
	CNT																								
	UQ																								
	LQ																								
foE	MED																								
	CNT																								
	UQ																								
	LQ																								
h'E	MED																								
	CNT																								
	UQ																								
	LQ																								
h'Ea	MED																								
	CNT																								
	UQ																								
	LQ																								

SHEEP 1.0 MC TO 25.0 MC IN 27 SECONDS.

AUGUST, 1963.

TABLE 2  
(13h-4h, 120-6E)

BAGUIO, LUZON		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
HOUR		U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
foF2	MED	56	48	46	43	40	43	38	31	25	20	29	31	31	31	31	31	31	31	31	31	31	31	31	31
	CNT	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	UQ	60	56	49	46	48	45	50	64	70	77	80	90	92	94	97	102	106	113	115	102	84	74	66	56
	LQ	46	40	44	36	36	36	46	56	60	64	72	77	74	83	86	89	94	96	93	90	66	58	40	
h'F2	MED	250	325	380	400	405	405	405	400	380	340	300													
	CNT	13	14	19	26	29	31	31	28	28	28	28													
	UQ																								
	LQ																								
h'F	MED	330	310	260	270	250	230	240	215	200	190	185	185	196	196	300	300	310	225	250	225	235	260	305	345
	CNT	30	19	21	19	12	10	31	26	22	15	17	16	14	19	17	13	14	13	28	31	31	28	23	23
	UQ																								
	LQ																								
M3000F2	MED	280	295	310	330	325	370	345	350	330	285	260	245	265	250	255	265	275	305	320	325	325	305	295	280
	CNT	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	UQ	325	340	330	335	330	370	365	360	335	300	275	265	265	265	265	275	290	315	335	340	345	320	300	300
	LQ	275	285	300	305	325	370	335	335	310	260	245	235	235	230	240	250	260	285	305	305	300	290	285	270
foF1	MED																								
	CNT																								
	UQ																								
	LQ																								
foE	MED																								
	CNT																								
	UQ																								
	LQ																								
h'E	MED																								
	CNT																								
	UQ																								
	LQ																								
h'Ea	MED																								
	CNT																								
	UQ																								
	LQ																								

SHEEP 1.0 MC TO 25.0 MC IN 27 SECONDS.

JULY, 1963.

TABLE 3  
(13h-4h, 120-6E)

BAGUIO, LUZON																								11h-45m, 12h-45m										TIME 1300-		
HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23											
foF2	MED	57	51	53	45	35	32	52	65	74	80	89	91	94	99	102	103	104	107	108	105	90	73	66	56											
	CNT	10	12	9	11	11	5	27	27	23	24	25	25	26	27	26	27	26	27	26	18	17	9	11	11											
	UQ	61	66	62	48	45	39	64	70	76	84	90	94	98	103	107	105	107	112	113	107	94	82	68	58											
	LQ	55	53	48	36	33	28	50	63	70	72	74	74	75	75	75	75	75	75	75	75	75	75	75	75											
h'F2	MED																																			
	CNT																																			
	UQ																																			
	LQ																																			
h'F	MED	320	280	250	250	235	250	245	230	210	210	195	210	200	210	210	210	225	240	260	240	250	280	370	350											
	CNT	20	19	21	14	11	5	26	22	14	11	13	14	16	11	9	12	15	7	27	27	24	22	19	15											
	UQ																																			
	LQ																																			
M3000F2	MED	290	315	325	335	340	330	335	315	290	285	235	230	225	245	265	270	275	290	310	320	305	285	280	270											
	CNT	6	10	9	8	8	9	8	8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7											
	UQ	190	210	240	260	280	260	260	230	210	200	160	160	150	160	170	180	180	190	200	210	200	190	180	170											
	LQ	285	310	320	330	330	330	330	325	335	280	245	230	235	235	240	255	265	270	275	290	310	295	275	260											
foF1	MED																																			
	CNT																																			
foE	MED																																			
	CNT																																			
h'E	MED																																			
	CNT																																			
foEs	MED	24	24	24	23	18	16	27	38	40	59	64	40	45	39	25	26	45	43	38	7	27	27	24	24											
	CNT																																			
	UQ																																			
	LQ																																			







TABLE 10

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COLLEGE (FAIRBANKS), ALASKA

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
f6 F2																									
MED	31	U	26	U	26	30	27	35	41	48	52	54	58	57	49	U	36	U	34	U	22	U	24	26	21
CNT	1	1	2	2	1	2	3	11	21	24	25	24	22	21	17	19	18	15	6	4	3	4	3	4	2
UQ							26	33	36	42	43	45	46	47	40	39	30	20	14	9	14	10	10	10	
f6 F2																									
MED																									
CNT																									
UQ																									
f6 F																									
MED																									
CNT																									
UQ																									
MIS00001F2																									
MED	30				31			30	25	26	30	33	35	35	35	340	U	30	35	35	310	310	340		
CNT	1				1			10	17	21	22	23	22	20	13	16	16	11	3	3	3	3	2		
UQ							21	22	23	23	23	23	23	23	20	20	20	20	20	20	20	20			
f6 F1																									
MED																									
CNT																									
f6 E																									
MED																									
CNT																									
UQ																									
f6 E1																									
MED	43	45	45	44	50	47	46	45	38	56	19														
CNT	18	16	13	14	14	16	9	4	5	20															
UQ																									

NOVEMBER, 1962

TABLE 12

3

NARSSARSSUAQ • GREENLAND

hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	U	3	5	U	0	2	7	2	6	4	U	0	2	5	3	6	4	U	0	2	5	3	6	4
MED	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
CNT	5	6	6	6	4	2	1	1	1	2	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5	3	6	4	U	0	2
UO	3	5	5	6	6	4	2	1	1	1	2	2	2	7	2	2	3	5</						

NOVEMBER, 1962

TABLE 9

(W)

THULE, GREENLAND

	hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f62	MED	15	24	26	45	2	1	25	27	28	17	36	18	37	33	40	2	44	2	3	35	7	27	26	24
	CNT	18	19	17	18	18	17	13	20	26	15	22	10	20	18	22	15	14	13	15	17	17	16	17	16
	U0	21	21	22	23	22	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
n'f2	MED	30	35	30	29	27	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
	CNT	30	35	30	29	27	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	
	U0	30	35	30	29	27	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	
n'f	MED	24	26	24	27	27	26	24	27	28	27	26	28	28	27	28	2	2	2	2	2	2	2	2	2
	CNT	26	28	27	27	26	24	27	28	27	26	28	28	27	28	2	2	2	2	2	2	2	2	2	2
	U0	25	24	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
M5000f2	MED	30	30	29	27	28	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
	CNT	30	30	29	27	28	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
	U0	30	30	29	27	28	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
f6f1	MED	30	30	29	27	28	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
	CNT	30	30	29	27	28	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
	U0	30	30	29	27	28	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
f6E	MED	30	30	29	27	28	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
	CNT	30	30	29	27	28	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
	U0	30	30	29	27	28	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
n'E	MED	30	30	29	27	28	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
	CNT	30	30	29	27	28	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
	U0	30	30	29	27	28	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
f6E4	MED	30	30	24	26	24	25	28	28	26	24	22	17	10	25	23	21	20	24	23	21	22	20	18	20
	CNT	28	28	24	26	24	25	28	28	26	24	22	17	10	25	23	21	24	26	23	21	22	20	18	20
	U0	30	30	29	27	28	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30

NOVEMBER, 1962

TABLE 11

(W)

REYKJAVIK, ICELAND

hour		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED		0	35	71	30	24	25	22	28	40	48	52	55	56	53	49	45	35	34	32	31	22	23	
	CNT	1	2	6	6	6	8	5	13	17	20	22	25	26	22	23	20	18	16	1	1				
	MD	0	35	71	30	24	25	22	28	40	48	52	55	56	53	49	45	35	34	32	31	22	23		
	LO	0	35	71	30	24	25	22	28	40	48	52	55	56	53	49	45	35	34	32	31	22	23		
f6F2	MED										300	1													
	CNT																								
	MD																								
	LO																								
f6F	MED	315	300	305	310	595	290	300	300	270	235	240	240	240	245	245	245	240	240	250	240	310	325	370	
	CNT	1	4	6	9	30	16	16	15	13	17	19	20	22	23	23	23	23	24	31	44	1	2		
	MD	315	300	305	310	595	290	300	300	270	235	240	240	240	245	245	245	240	240	250	240	310	325	370	
	LO	315	300	305	310	595	290	300	300	270	235	240	240	240	245	245	245	240	240	250	240	310	325	370	
MIS0001F2	MED																								
	CNT																								
	MD																								
	LO																								
f6F1	MED																								
	CNT																								
	MD																								
	LO																								
f6E	MED										210														
	CNT																								
	MD																								
	LO																								
f6E	MED																								
	CNT																								
	MD																								
	LO																								
f6Ea	MED	34	35	32	32	32	24	30	28	33	5	5	5	5	44	4	4	4	4	36	40	36	58	34	40
	CNT	11	12	13	6	3	1	2	1	2	50	21	3	2	4	4	4	4	4	14	16	6	16	10	
	MD	34	35	32	32	32	24	30	28	33	5	5	5	5	44	4	4	4	4	36	40	36	58	34	
	LO	34	35	32	32	32	24	30	28	33	5	5	5	5	44	4	4	4	4	36	40	36	58	34	

NOVEMBER, 1962

[illegible]

TABLE 16  
TALARA, PERU  
1946-51

[illegible]

WASHINGTON, D.C.

NAME \_\_\_\_\_

PHONE \_\_\_\_\_

TABLE 1

17

hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED	28	31	30	33	32	33	33	34	33	34	33	34	33	34	33	34	33	34	33	34	33	34	33
	CNT	28	28	29	29	28	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30	30	29	28
	UO	31	34	34	35	34	32	30	28	26	24	23	22	21	20	19	18	17	16	15	14	13	12	11
	LG	26	26	26	27	27	26	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8
hF2	MED	23	23	23	23	23	23	23	23	23	24	23	23	24	23	24	23	24	23	24	23	24	23	23
	CNT	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
	UO	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
	LG	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
hF	MED	560	560	570	570	560	565	555	550	540	530	520	510	500	490	480	470	460	450	440	430	420	410	400
	CNT	50	29	29	28	28	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
	UO	570	570	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560
	LG	570	570	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560
M3000F2	MED	300	300	300	310	320	310	340	355	355	340	335	340	340	340	340	345	340	320	330	320	310	300	290
	CNT	29	26	25	28	26	25	24	29	29	30	30	30	30	30	30	30	30	30	29	29	29	28	
	UO	310	308	310	315	320	330	335	360	360	360	350	345	340	340	340	340	340	330	335	330	310	320	
	LG	290	299	300	300	305	310	300	310	340	340	335	330	330	330	330	335	340	315	320	315	300	300	305
f6F1	MED	300	300	300	310	320	310	340	355	355	340	335	340	340	340	340	345	340	320	330	320	310	300	290
	CNT	29	26	25	28	26	25	24	29	29	30	30	30	30	30	30	30	30	30	29	29	29	28	
	UO	310	308	310	315	320	330	335	360	360	360	350	345	340	340	340	340	340	330	335	330	310	320	
	LG	290	299	300	300	305	310	300	310	340	340	335	330	330	330	330	335	340	315	320	315	300	300	305
f6E	MED	300	300	300	310	320	310	340	355	355	340	335	340	340	340	340	345	340	320	330	320	310	300	290
	CNT	29	26	25	28	26	25	24	29	29	30	30	30	30	30	30	30	30	30	29	29	29	28	
	UO	310	308	310	315	320	330	335	360	360	360	350	345	340	340	340	340	340	330	335	330	310	320	
	LG	290	299	300	300	305	310	300	310	340	340	335	330	330	330	330	335	340	315	320	315	300	300	305
hE	MED	151	113	119	119	100	112	136	113	117	119	122	123	28	27	29	30	30	30	30	30	30	30	30
	CNT	1	23	28	27	29	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
	UO	151	113	119	119	100	112	136	113	117	119	122	123	28	27	29	30	30	30	30	30	30	30	30
	LG	1	23	28	27	29	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
f6Ea	MED	22	32	22	20	28	24	36	17	24	26	28	30	30	26	26	24	24	22	30	35	30	28	26
	CNT	11	11	15	16	8	6	23	29	250	30	30	30	30	30	30	30	30	15	17	17	17	17	10
	UO	22	32	22	20	28	24	36	17	24	26	28	30	30	26	26	24	24	22	30	35	30	28	26
	LG	11	11	15	16	8	6	23	29	250	30	30	30	30	30	30	30	30	15	17	17	17	17	10

MAUI, HAWAII  
(20.8N, 156.5W)

[illegible]



[illegible][illegible]

OCTOBER, 1962

$\Delta V$	$\Delta V$	$1.64 \pm 1.14$	$2.1 \pm 0.6$
TABLE 20			

[illegible][illegible][illegible][illegible]

NOVEMBER, 1943

$\alpha_1 = \beta_1 + \gamma_1$

[illegible]



TIME 75.0W

74.191

74.191

74.191

74.191

74.191

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT UQ LO																							
f6F2	MED CNT UQ LO																							
f6F	MED CNT UQ LO																							
M3000F2	MED CNT UQ LO																							
f6F1	MED CNT																							
f6E	MED CNT																							
f6E	MED CNT																							
f6Ea	MED CNT																							

OCTOBER, 1942

TABLE 74

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT UQ LO																							
f6F2	MED CNT UQ LO																							
f6F	MED CNT UQ LO																							
M3000F2	MED CNT UQ LO																							
f6F1	MED CNT																							
f6E	MED CNT																							
f6E	MED CNT																							
f6Ea	MED CNT																							

OCTOBER, 1942

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT UQ LO																							
f6F2	MED CNT UQ LO																							
f6F	MED CNT UQ LO																							
M3000F2	MED CNT UQ LO																							
f6F1	MED CNT																							
f6E	MED CNT																							
f6E	MED CNT																							
f6Ea	MED CNT																							

OCTOBER, 1942

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT UQ LO																							
f6F2	MED CNT UQ LO																							
f6F	MED CNT UQ LO																							
M3000F2	MED CNT UQ LO																							
f6F1	MED CNT																							
f6E	MED CNT																							
f6E	MED CNT																							
f6Ea	MED CNT																							

OCTOBER, 1942

SPEED 140 MC TO 75.0 MC IN 37 SECONDS

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT LO	3.9 1.2 0.8	4.2 1.5 1.0	4.5 1.8 1.3	4.8 2.1 1.6	5.1 2.4 1.9	5.4 2.7 2.2	5.7 3.0 2.5	6.0 3.3 2.8	6.3 3.6 3.1	6.6 3.9 3.4	6.9 4.2 3.7	7.2 4.5 4.0	7.5 4.8 4.3	7.8 5.1 4.6	8.1 5.4 4.9	8.4 5.7 5.2	8.7 6.0 5.5	9.0 6.3 5.8	9.3 6.6 6.1	9.6 6.9 6.4	9.9 7.2 6.7	10.2 7.5 7.0	10.5 7.8 7.3
N F2	MED CNT LO																							
N F	MED CNT LO																							
M3000F2	MED CNT LO																							
f6F1	MED CNT																							
f6E	MED CNT																							
N E	MED CNT																							
f6E4	MED CNT																							

SHEEP 1.0" M TO 23.4" WITH 10.0" SPACING.

OCTOBER, 1962

TABLE 26

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT LO	3.9 1.2 0.8	4.2 1.5 1.0	4.5 1.8 1.3	4.8 2.1 1.6	5.1 2.4 1.9	5.4 2.7 2.2	5.7 3.0 2.5	6.0 3.3 2.8	6.3 3.6 3.1	6.6 3.9 3.4	6.9 4.2 3.7	7.2 4.5 4.0	7.5 4.8 4.3	7.8 5.1 4.6	8.1 5.4 4.9	8.4 5.7 5.2	8.7 6.0 5.5	9.0 6.3 5.8	9.3 6.6 6.1	9.6 6.9 6.4	9.9 7.2 6.7	10.2 7.5 7.0	10.5 7.8 7.3
N F2	MED CNT LO																							
N F	MED CNT LO																							
M3000F2	MED CNT LO																							
f6F1	MED CNT																							
f6E	MED CNT																							
N E	MED CNT																							
f6E4	MED CNT																							

SHEEP 1.0" M TO 23.4" WITH 10.0" SPACING.

OCTOBER, 1962

TABLE 27

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT LO																							
N F2	MED CNT LO																							
N F	MED CNT LO																							
M3000F2	MED CNT LO																							
f6F1	MED CNT																							
f6E	MED CNT																							
N E	MED CNT																							
f6E4	MED CNT																							

SHEEP 1.0" M TO 23.4" WITH 10.0" SPACING.

OCTOBER, 1962

TABLE 28

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT LO	3.9 1.2 0.8	4.2 1.5 1.0	4.5 1.8 1.3	4.8 2.1 1.6	5.1 2.4 1.9	5.4 2.7 2.2	5.7 3.0 2.5	6.0 3.3 2.8	6.3 3.6 3.1	6.6 3.9 3.4	6.9 4.2 3.7	7.2 4.5 4.0	7.5 4.8 4.3	7.8 5.1 4.6	8.1 5.4 4.9	8.4 5.7 5.2	8.7 6.0 5.5	9.0 6.3 5.8	9.3 6.6 6.1	9.6 6.9 6.4	9.9 7.2 6.7	10.2 7.5 7.0	10.5 7.8 7.3
N F2	MED CNT LO																							
N F	MED CNT LO																							
M3000F2	MED CNT LO																							
f6F1	MED CNT																							
f6E	MED CNT																							
N E	MED CNT																							
f6E4	MED CNT																							

OCTOBER, 1962

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT LO																							
f6F2	MED CNT LO																							
f6F	MED CNT LO																							
M3000IF2	MED CNT LO																							
f6F1	MED CNT																							
f6E	MED CNT																							
f6E	MED CNT																							
f6Ea	MED CNT																							

SEPTEMBER, 1962

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS.

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT LO																							
f6F2	MED CNT LO																							
f6F	MED CNT LO																							
M3000IF2	MED CNT LO																							
f6F1	MED CNT																							
f6E	MED CNT																							
f6E	MED CNT																							
f6Ea	MED CNT																							

SEPTEMBER, 1962

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS.

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT LO																							
f6F2	MED CNT LO																							
f6F	MED CNT LO																							
M3000IF2	MED CNT LO																							
f6F1	MED CNT																							
f6E	MED CNT																							
f6E	MED CNT																							
f6Ea	MED CNT																							

SEPTEMBER, 1962

SWEEP 1.0 MC TO 25.0 MC IN 15 SECONDS.

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT LO																							
f6F2	MED CNT LO																							
f6F	MED CNT LO																							
M3000IF2	MED CNT LO																							
f6F1	MED CNT																							
f6E	MED CNT																							
f6E	MED CNT																							
f6Ea	MED CNT																							

SEPTEMBER, 1962

SWEEP 1.0 MC TO 25.0 MC IN 16.2 SECONDS.



WASHINGTON, D.C.  
138.7N, 77.1W

[illegible]

SEPTEMBER, 1962

TABLE 36

OKINAWA I.

(26.3N, 127.6E)

	HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	7.6	7.6	7.6	7.6	15.4	13.6	13.5	13.1	13.6	16.8	20.4	3.6	7.0	5.2	4.8	4.5
	UO	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	7.6	7.6	7.6	7.6	11.1	11.1	11.1	11.1	13.2	15.4	2.9	5.2	2.8	2.2	2.5	
	LO	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	5.6	5.6	5.6	5.6	7.7	7.7	7.7	7.7	9.8	11.2	1.6	4.4	5.6	5.4	4.2	
f6F2	MED							32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9					
	CNT							24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5					
	LO							27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1					
f6F	MED	3.00	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7					
	CNT	3.29	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9					
	LO	2.87	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6					
M3000F2	MED	3.65	3	3	3	3	3	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65					
	CNT	3.24	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8					
	UO	3.05	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3					
f6F1	MED	2.65	3	3	3	3	3	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65					
	CNT							3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65					
	LO							3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65					
f6E	MED							3	3	3	3	3	3	3	3	3	3	3	3	3					
	CNT							27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9					
	LO							27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9					
f6E	MED							3	3	3	3	3	3	3	3	3	3	3	3	3					
	CNT							3	3	3	3	3	3	3	3	3	3	3	3	3					
	LO							3	3	3	3	3	3	3	3	3	3	3	3	3					
f6E4	MED	3.6	3	3	3	3	3	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6					
	CNT							3	3	3	3	3	3	3	3	3	3	3	3	3					
	LO							3	3	3	3	3	3	3	3	3	3	3	3	3					
f6E4	MED	3.6	3	3	3	3	3	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6					
	CNT							3	3	3	3	3	3	3	3	3	3	3	3	3					
	LO							3	3	3	3	3	3	3	3	3	3	3	3	3					
f6E4	MED	3.6	3	3	3	3	3	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6					
	CNT							3	3	3	3	3	3	3	3	3	3	3	3	3					
	LO							3	3	3	3	3	3	3	3	3	3	3	3	3					
f6E4	MED	3.6	3	3	3	3	3	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6					
	CNT							3	3	3	3	3	3	3	3	3	3	3	3	3					
	LO							3	3	3	3	3	3	3	3	3	3	3	3	3					
f6E4	MED	3.6	3	3	3	3	3	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6					
	CNT							3	3	3	3	3	3	3	3	3	3	3	3	3					
	LO							3	3	3	3	3	3	3	3	3	3	3	3	3					
f6E4	MED	3.6	3	3	3	3	3	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6					
	CNT							3	3	3	3	3	3	3	3	3	3	3	3	3					
	LO							3	3	3	3	3	3	3	3	3	3	3	3	3					
f6E4	MED	3.6	3	3	3	3	3	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6					
	CNT							3	3	3	3	3	3	3	3	3	3	3	3	3					
	LO							3	3	3	3	3	3	3	3	3	3	3	3	3					
f6E4	MED	3.6	3	3	3	3	3	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6					
	CNT							3	3	3	3	3	3	3	3	3	3	3	3	3					
	LO							3	3	3	3	3	3	3	3	3	3	3	3	3					
f6E4	MED	3.6	3	3	3	3	3	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6					
	CNT							3	3	3	3	3	3	3	3	3	3	3	3	3					
	LO							3	3	3	3	3	3	3	3	3	3	3	3	3					
f6E4	MED	3.6	3	3	3	3	3	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6					
	CNT							3	3	3	3	3	3	3	3	3	3	3	3	3					
	LO							3	3	3	3	3	3	3	3	3	3	3	3	3					
f6E4	MED	3.6	3	3	3	3	3	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6					
	CNT							3	3	3	3	3	3	3	3	3	3	3	3	3					
	LO							3	3	3	3	3	3	3	3	3	3	3	3	3					
f6E4	MED	3.6	3	3	3	3	3	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6					
	CNT							3	3	3	3	3	3	3	3	3	3	3	3	3					
	LO							3	3	3	3	3	3	3	3	3	3	3	3	3					
f6E4	MED	3.6	3	3	3	3	3	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6					
	CNT							3	3	3	3	3	3	3	3	3	3	3	3	3					
	LO							3	3	3	3	3	3	3	3	3	3	3	3	3					
f6E4	MED	3.6	3	3	3	3	3	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6					
	CNT							3	3	3	3	3	3	3	3	3	3	3	3	3					
	LO							3	3	3	3	3	3	3	3	3	3	3	3	3					
f6E4	MED	3.6	3	3	3	3	3	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6					
	CNT							3	3	3	3	3	3	3	3	3	3	3	3	3					
	LO							3	3	3	3	3	3	3	3	3	3	3	3	3					
f6E4	MED	3.6	3	3	3	3	3	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6					
	CNT							3	3	3	3	3	3	3	3	3	3	3	3	3					
	LO							3	3	3	3	3	3	3	3	3	3	3	3	3					
f6E4	MED	3.6	3	3	3	3	3	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6					
	CNT							3	3	3	3	3	3	3	3	3	3	3	3	3					
	LO							3	3	3	3	3	3	3	3	3	3	3	3	3					
f6E4	MED	3.6	3	3	3	3	3	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6					
	CNT							3	3	3	3	3	3	3	3	3	3	3	3	3					
	LO							3	3	3	3	3	3	3	3	3	3	3	3	3					
f6E4	MED	3.6	3	3	3	3	3	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6					
	CNT							3	3	3	3	3	3	3	3	3	3	3	3	3					
	LO							3	3	3	3	3	3	3	3	3	3	3	3	3					
f6E4	MED																								

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ACACI 211

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[illegible]

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TABLE 35

TIME 75.0W

[illegible]

REVIEWS • 1942

TABLE 39  
TALARA, PERU  
SWEET 1.0 MC TO 25.0 MC IN 27 SECONDS, 1962

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f <sub>0</sub> F2	MED CNT UQ LQ																							
h'F2	MED CNT UQ LQ																							
h'F	MED CNT UQ LQ																							
M3000IF2	MED CNT UQ LQ																							
f <sub>0</sub> F1	MED CNT																							
f <sub>0</sub> E	MED CNT																							
N'E	MED CNT																							
f <sub>0</sub> Es	MED CNT																							

SWEET 1.0 MC TO 25.0 MC IN 27 SECONDS.

SEPTEMBER, 1962

TABLE 40  
THULE, GREENLAND  
SWEET 1.0 MC TO 25.0 MC IN 27 SECONDS, 1962

TABLE 40  
THULE, GREENLAND  
SWEET 1.0 MC TO 25.0 MC IN 27 SECONDS, 1962

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f <sub>0</sub> F2	MED CNT UQ LQ																							
h'F2	MED CNT UQ LQ																							
h'F	MED CNT UQ LQ																							
M3000IF2	MED CNT UQ LQ																							
f <sub>0</sub> F1	MED CNT																							
f <sub>0</sub> E	MED CNT																							
N'E	MED CNT																							
f <sub>0</sub> Es	MED CNT																							

SWEET 1.0 MC TO 25.0 MC IN 27 SECONDS.

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TABLE 39  
TALARA, PERU  
SWEET 1.0 MC TO 25.0 MC IN 27 SECONDS, 1962

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f <sub>0</sub> F2	MED CNT UQ LQ																							
h'F2	MED CNT UQ LQ																							
h'F	MED CNT UQ LQ																							
M3000IF2	MED CNT UQ LQ																							
f <sub>0</sub> F1	MED CNT																							
f <sub>0</sub> E	MED CNT																							
N'E	MED CNT																							
f <sub>0</sub> Es	MED CNT																							

SWEET 1.0 MC TO 25.0 MC IN 27 SECONDS.

SEPTEMBER, 1962

TABLE 40  
THULE, GREENLAND  
SWEET 1.0 MC TO 25.0 MC IN 27 SECONDS, 1962

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f <sub>0</sub> F2	MED CNT UQ LQ																							
h'F2	MED CNT UQ LQ																							
h'F	MED CNT UQ LQ																							
M3000IF2	MED CNT UQ LQ																							
f <sub>0</sub> F1	MED CNT																							
f <sub>0</sub> E	MED CNT																							
N'E	MED CNT																							
f <sub>0</sub> Es	MED CNT																							

SWEET 1.0 MC TO 25.0 MC IN 27 SECONDS.

SEPTEMBER, 1962

BARROW, ALASKA  
(71.3N, 156.6W)  
1950-51

[illegible]

COLLEGE (FAIRBANKS), ALASKA (64.0N, 147.0W)

[illegible]

TABLE 44

[illegible]

TABLE 44

[illegible]











TABLE 57

(32.3N, 106.5W)

WHITE SANDS, NEW MEXICO

WHITE SANDS, NEW MEXICO		132-316, 176-451										TIME 105-5													
	HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6 F2	MED	0.8	0.5	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	LOW	0.8	0.7	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	LO	0.8	0.7	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
n' F2	MED	0.8	0.7	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	LOW	0.8	0.7	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	LO	0.8	0.7	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
n' F	MED	0.8	0.7	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	LOW	0.8	0.7	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	LO	0.8	0.7	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
MIS000/F2	MED	0.8	0.7	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	LOW	0.8	0.7	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	LO	0.8	0.7	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
f6 F1	MED	0.8	0.7	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	LOW	0.8	0.7	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	LO	0.8	0.7	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
f6 E	MED	0.8	0.7	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	LOW	0.8	0.7	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	LO	0.8	0.7	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
n' E	MED	0.8	0.7	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	LOW	0.8	0.7	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	LO	0.8	0.7	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
f6 E4	MED	0.8	0.7	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	LOW	0.8	0.7	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	LO	0.8	0.7	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5

[illegible]

JULY 1947

TABLE 59

(7.8E)

OKTAY 1.

[illegible]

SWEET L. C. M. C. C. AN IN 27 SECONDS.

JULY, 1962

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1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 26

MAJ. HAWATTE

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3396. 1. TO 200 MC IN 27 YEARS.

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17.00V

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(71.00, 17.00)

TIME 150.00

00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F
16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E
16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F
M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2
16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F
16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E
16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E
16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*

JULY 1962

SWEEP 1.4 MC IN 1.5 SECONDS\*

SWEEP 1.4 MC TO 25.4 MC IN 17 SECONDS\*

JUNE 1962

17.00V

00000000 ALTA

(71.00, 17.00)

TIME 150.00

00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16F2	16F2	16F2	16F2	16F2	16F2	16F2	16F2	16F2	16F2	16F2	16F2	16F2	16F2	16F2	16F2	16F2	16F2	16F2	16F2	16F2	16F2	16F2	16F2
16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F
M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2	M3000IF2
16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F	16F
16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E
16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E	16E
16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*	16E*

JUNE 1962

SWEEP 1.4 MC TO 25.4 MC IN 15 SECONDS\*

SWEEP 1.4 MC TO 25.4 MC IN 17 SECONDS\*

JUNE 1962

DATE	TIME	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16F2	MED CNT LO																								
16F2	MED CNT LO																								
16F	MED CNT LO																								
MIS000IF2	MED CNT LO																								
16F1	MED CNT																								
16E	MED CNT																								
16E	MED CNT																								
16E4	MED CNT																								

SUPER 1.0 MC TO 25.0 MC IN 24 SECONDS

JUNE 1962

DATE	TIME	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16F2	MED CNT LO																								
16F2	MED CNT LO																								
16F	MED CNT LO																								
MIS000IF2	MED CNT LO																								
16F1	MED CNT																								
16E	MED CNT																								
16E	MED CNT																								
16E4	MED CNT																								

SUPER 1.0 MC TO 25.0 MC IN 24 SECONDS

JUNE 1962

DATE	TIME	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16F2	MED CNT LO																								
16F2	MED CNT LO																								
16F	MED CNT LO																								
MIS000IF2	MED CNT LO																								
16F1	MED CNT																								
16E	MED CNT																								
16E	MED CNT																								
16E4	MED CNT																								

SUPER 1.0 MC TO 25.0 MC IN 24 SECONDS

JUNE 1962

DATE	TIME	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16F2	MED CNT LO																								
16F2	MED CNT LO																								
16F	MED CNT LO																								
MIS000IF2	MED CNT LO																								
16F1	MED CNT																								
16E	MED CNT																								
16E	MED CNT																								
16E4	MED CNT																								

SUPER 1.0 MC TO 25.0 MC IN 24 SECONDS

JUNE 1962

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
h F2	MED																							
	CNT																							
	UQ																							
	LO																							
h F2	MED																							
	CNT																							
	UQ																							
	LO																							
h F	MED																							
	CNT																							
	UQ																							
	LO																							
M3000F2	MED																							
	CNT																							
	UQ																							
	LO																							
h F	MED																							
	CNT																							
h E	MED																							
	CNT																							
h E	MED																							
	CNT																							
h Es	MED																							
	CNT																							

10/10/19

Time 45:00

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
h F2	MED																							
	CNT																							
	UQ																							
	LO																							
h F2	MED																							
	CNT																							
	UQ																							
	LO																							
h F	MED																							
	CNT																							
	UQ																							
	LO																							
M3000F2	MED																							
	CNT																							
	UQ																							
	LO																							
h F1	MED																							
	CNT																							
h E	MED																							
	CNT																							
h E	MED																							
	CNT																							
h Es	MED																							
	CNT																							

10/10/19

Time 10:00

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
h F2	MED																							
	CNT																							
	UQ																							
	LO																							
h F2	MED																							
	CNT																							
	UQ																							
	LO																							
h F	MED																							
	CNT																							
	UQ																							
	LO																							
M3000F2	MED																							
	CNT																							
	UQ																							
	LO																							
h F1	MED																							
	CNT																							
h E	MED																							
	CNT																							
h E	MED																							
	CNT																							
h Es	MED																							
	CNT																							

10/10/19



TABLE 7A

TABLE 7A GREENLAND, GREENLAND (15122H, 054500)																								TIME 054500
HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16F2	MED CNT UG LG																							
16F2	MED CNT UG LG																							
16F	MED CNT UG LG																							
M13000IF2	MED CNT UG LG																							
16F1	MED CNT																							
16E	MED CNT																							
16E	MED CNT																							
16E4	MED CNT																							

TABLE 7A  
GREENLAND, GREENLAND  
(15122H, 054500)

TABLE 7A

TABLE 7A GREENLAND, GREENLAND (15122H, 054500)																								TIME 054500
HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16F2	MED CNT UG LG																							
16F2	MED CNT UG LG																							
16F	MED CNT UG LG																							
M13000IF2	MED CNT UG LG																							
16F	MED CNT																							
16E	MED CNT																							
16E	MED CNT																							
16E4	MED CNT																							

TABLE 7A  
GREENLAND, GREENLAND  
(15122H, 054500)

TABLE 7A

100																							
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TABLE 7A  
GREENLAND, GREENLAND  
(15122H, 054500)

TABLE 7A

1700000, 2000000 (167, 000, 2000000)																								7100			
HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
16F2	MED CNT UG LG																										
16F2	MED CNT UG LG																										
16F	MED CNT UG LG																										
M13000IF2	MED CNT UG LG																										
16F1	MED CNT																										
16E	MED CNT																										
16E	MED CNT																										
16E4	MED CNT																										

TABLE 7A  
GREENLAND, GREENLAND  
(15122H, 054500)

95 L.7.50

[illegible][illegible]

Received 10 May 1993

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U. S. S. S. R., 1961



TABLE 89

[illegible]

SWEEP 10 MC -C 25.0 M- 1.0' 5.0115.0

101 PAGE: 1511

16 270-9

[illegible]

TABLE 90

[illegible]

• Su. 27. 11. 2006 01. 33m

OCTOBER, 1961

TABLE 92

[illegible]

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT UQ LQ																							
h F2	MED CNT UQ LQ																							
h F	MED CNT UQ LQ																							
M3000IF2	MED CNT UQ LQ																							
f6F	MED CNT																							
f6E	MED CNT																							
h E	MED CNT																							
f6Es	MED CNT																							

1 AUGUST 1961

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT UQ LQ																							
h F2	MED CNT UQ LQ																							
h F	MED CNT UQ LQ																							
M3000IF2	MED CNT UQ LQ																							
f6F	MED CNT																							
f6E	MED CNT																							
h E	MED CNT																							
f6Es	MED CNT																							

1 AUGUST 1961

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT UQ LQ																							
h F2	MED CNT UQ LQ																							
h F	MED CNT UQ LQ																							
M3000IF2	MED CNT UQ LQ																							
f6F	MED CNT																							
f6E	MED CNT																							
h E	MED CNT																							
f6Es	MED CNT																							

1 AUGUST 1961

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT UQ LQ																							
h F2	MED CNT UQ LQ																							
h F	MED CNT UQ LQ																							
M3000IF2	MED CNT UQ LQ																							
f6F	MED CNT																							
f6E	MED CNT																							
h E	MED CNT																							
f6Es	MED CNT																							

1 AUGUST 1961

TABLE 37

BYRD STATION, ANTARCTICA 140°05' 170°00'													TIME 1700H											
HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16F2	MED CNT UQ LQ	15 36 32 1	36 27 32 1	36 27 32 1	29 21 32 2	29 21 32 2	29 21 32 2	29 21 32 2	14 14 29 1	14 14 29 1	14 14 29 1	14 14 29 1	14 14 29 1	14 14 29 1	14 14 29 1	14 14 29 1	14 14 29 1	14 14 29 1	14 14 29 1	14 14 29 1	14 14 29 1	14 14 29 1	14 14 29 1	
16F2	MED CNT UQ LQ																							
16F	MED CNT UQ LQ																							
M13000IF2	MED CNT UQ LQ																							
16F1	MED CNT																							
16E	MED CNT																							
16E	MED CNT																							
16Es	MED CNT																							

MAY, 1961

TABLE 38

BYRD STATION, ANTARCTICA 140°05' 170°00'																							TIME 1200H				
HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
16F2	MED CNT UQ LQ	15 36 32 1	36 27 32 1	36 27 32 1	29 21 32 2	29 21 32 2	29 21 32 2	29 21 32 2	14 14 29 1	14 14 29 1	14 14 29 1	14 14 29 1	14 14 29 1	14 14 29 1	14 14 29 1	14 14 29 1	14 14 29 1	14 14 29 1	14 14 29 1	14 14 29 1	14 14 29 1	14 14 29 1	14 14 29 1	14 14 29 1			
16F2	MED CNT UQ LQ																										
16F	MED CNT UQ LQ																										
M13000IF2	MED CNT UQ LQ																										
16F1	MED CNT																										
16E	MED CNT																										
16E	MED CNT																										
16Es	MED CNT																										

MAY, 1961

PARAMETER, 1961

PARAMETER, 1961													TIME 1200H											
HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16F2	MED CNT UQ LQ																							
16F2	MED CNT UQ LQ																							
16F	MED CNT UQ LQ																							
M13000IF2	MED CNT UQ LQ																							
16F1	MED CNT																							
16E	MED CNT																							
16E	MED CNT																							
16Es	MED CNT																							

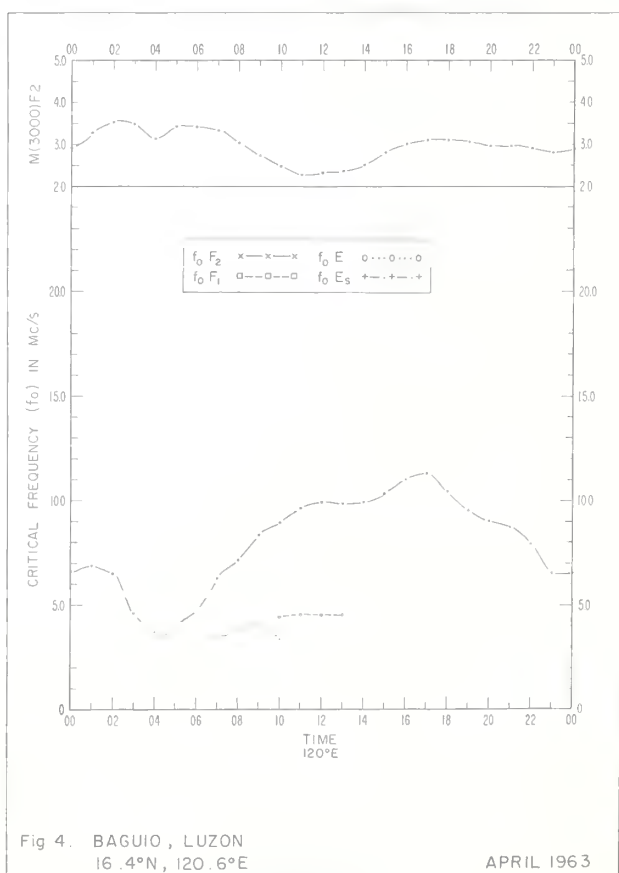
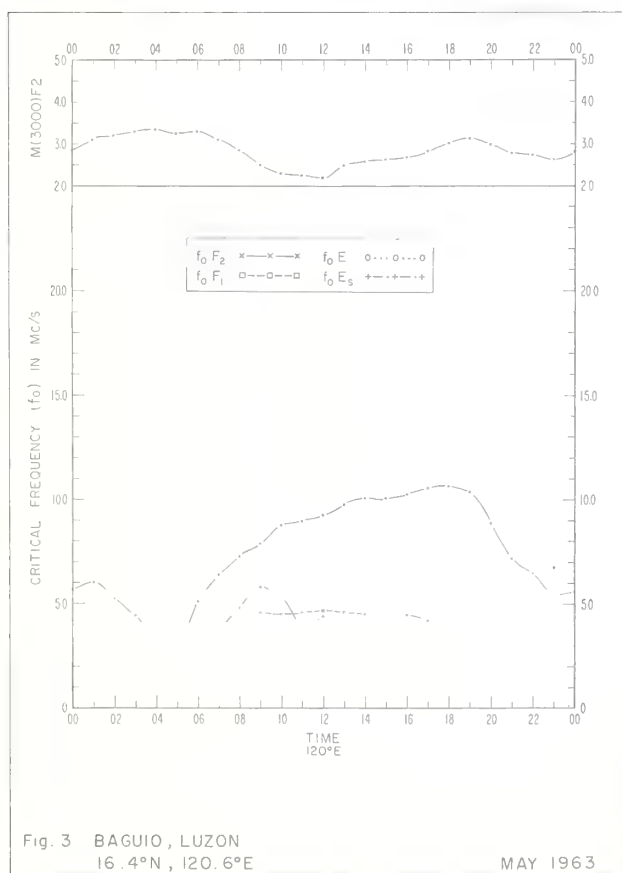
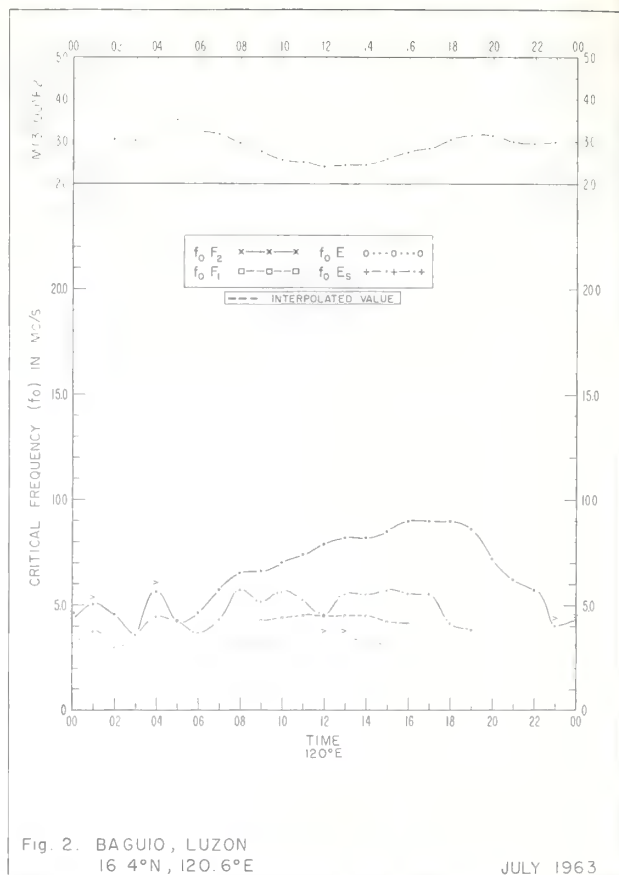
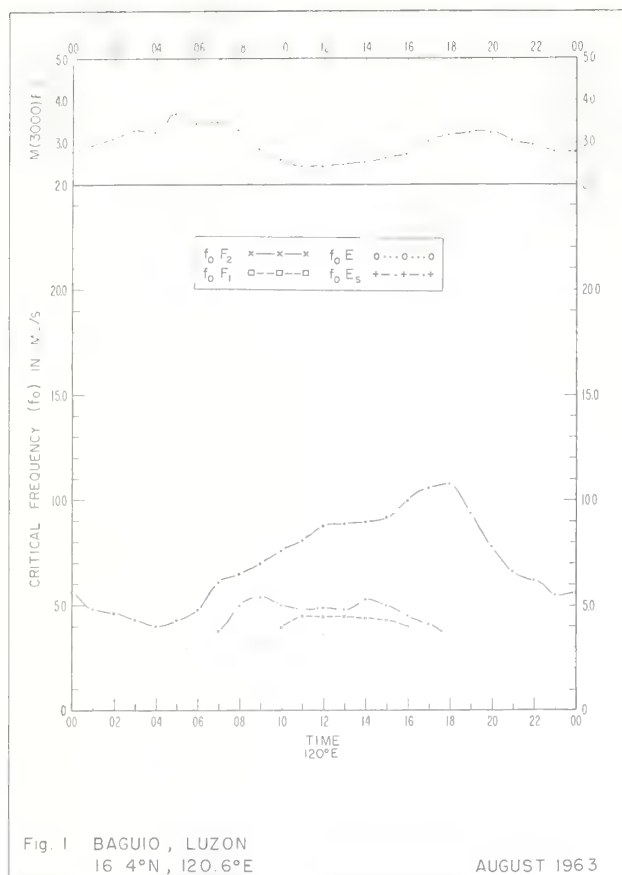
MAY, 1961

TABLE 39

PARAMETER, 1961													TIME 1200H											
HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16F2	MED CNT UQ LQ																							
16F2	MED CNT UQ LQ																							
16F	MED CNT UQ LQ																							
M13000IF2	MED CNT UQ LQ																							
16F1	MED CNT																							
16E	MED CNT																							
16E	MED CNT																							
16Es	MED CNT																							

MAY, 1961





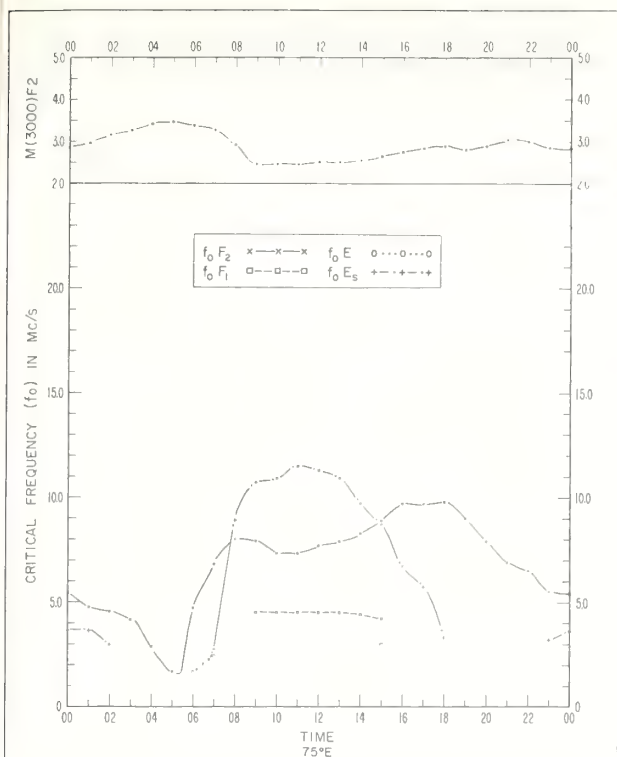


Fig. 5. KODAIKANAL, INDIA  
10.2°N, 77.5°E

APRIL 1963

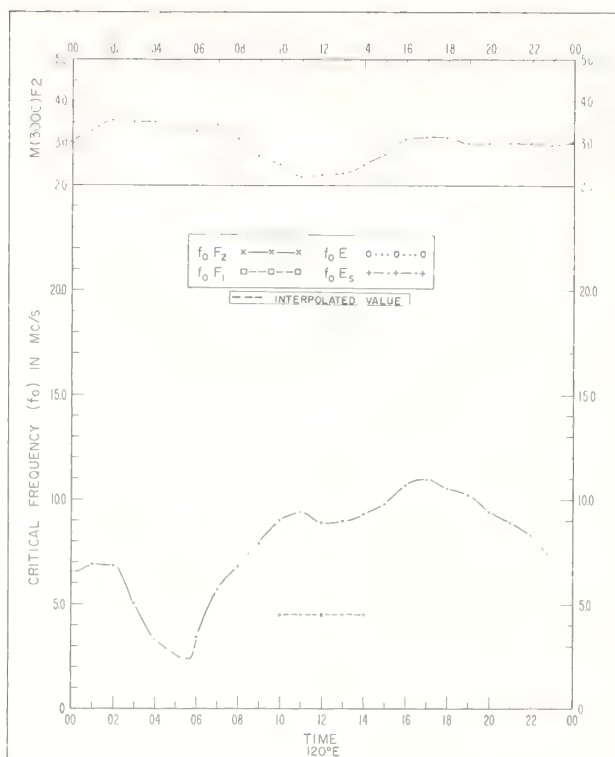


Fig. 6. BAGUIO, LUZON  
16.4°N, 120.6°E

MARCH 1963

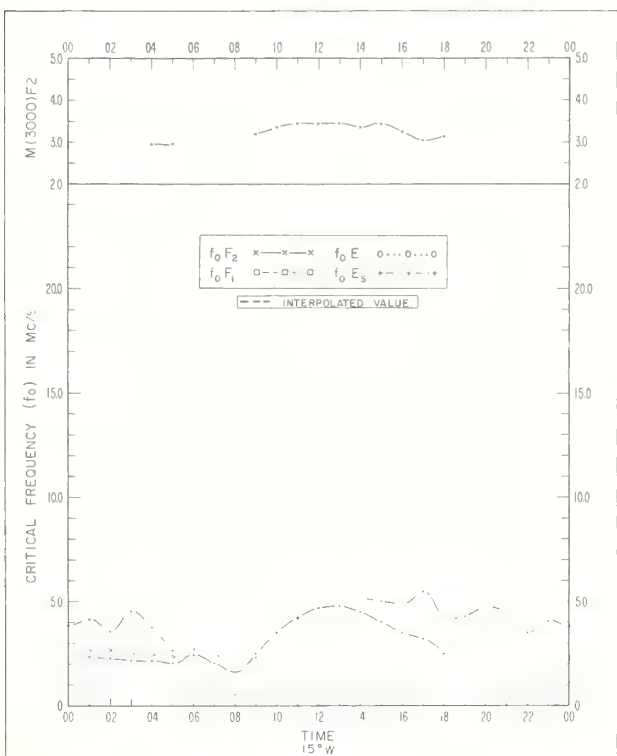


Fig. 7. REYKJAVIK, ICELAND  
64.1°N, 21.8°W

DECEMBER 1962

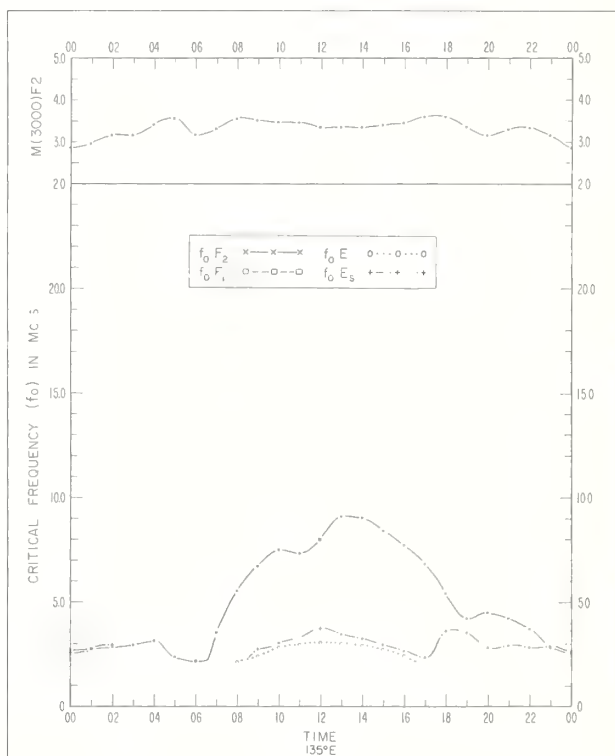


Fig. 8. OKINAWA I.  
26.3°N, 127.8°E

DECEMBER 1962

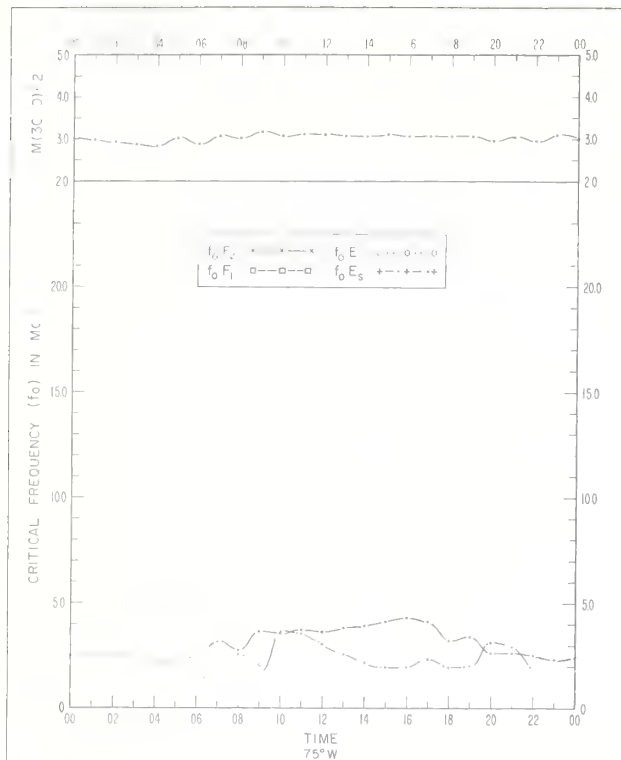


Fig 9 THULE, GREENLAND  
76 0°N, 68 0°W

NOVEMBER 1962

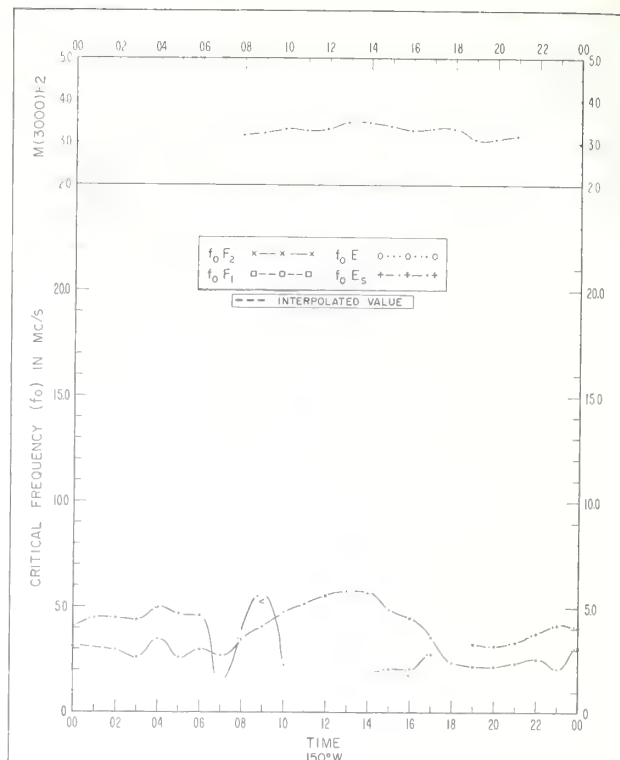


Fig 10. COLLEGE (FAIRBANKS), ALASKA  
64.9°N, 147 8°W

NOVEMBER 1962

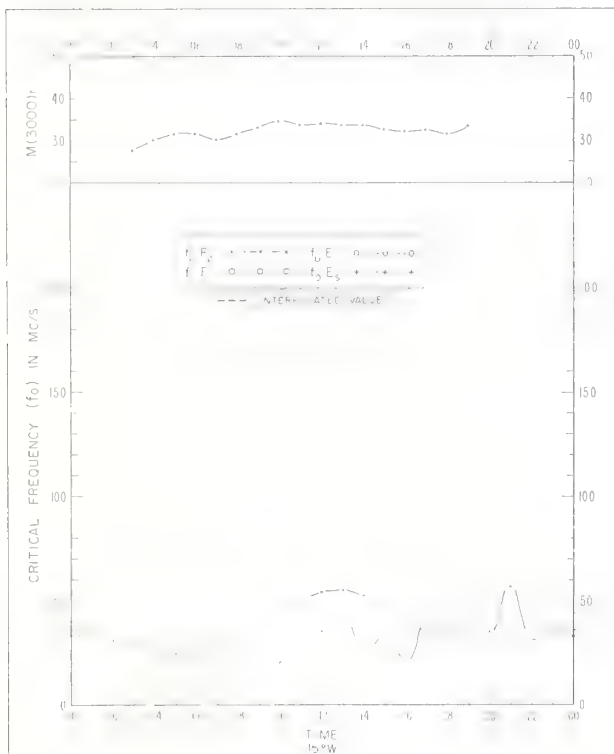


Fig. 11. REYKJAVIK, ICELAND  
64.1°N, 21 8°W

NOVEMBER 1962

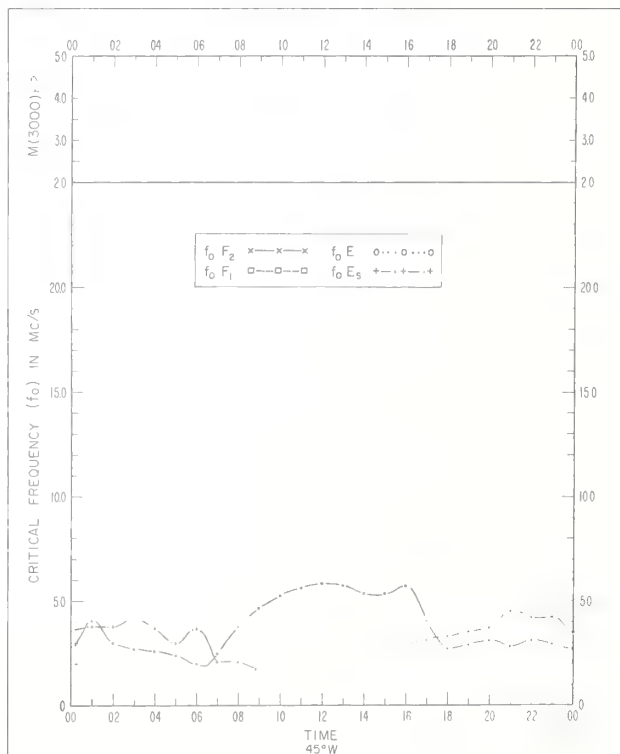
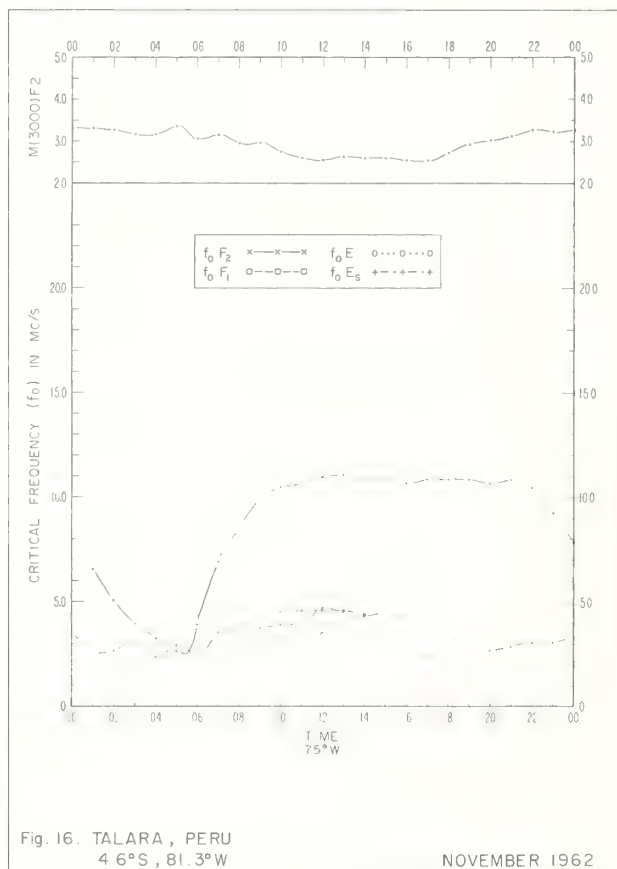
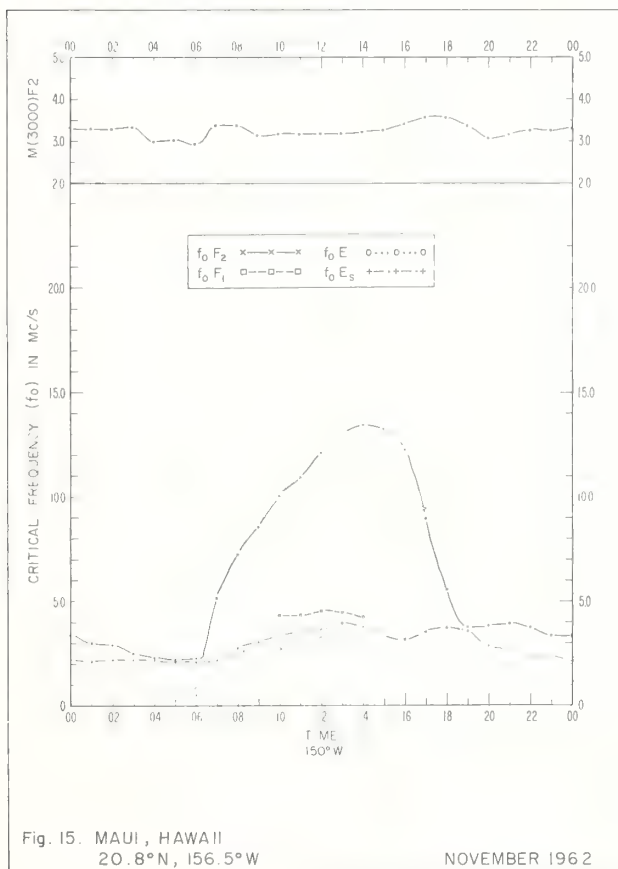
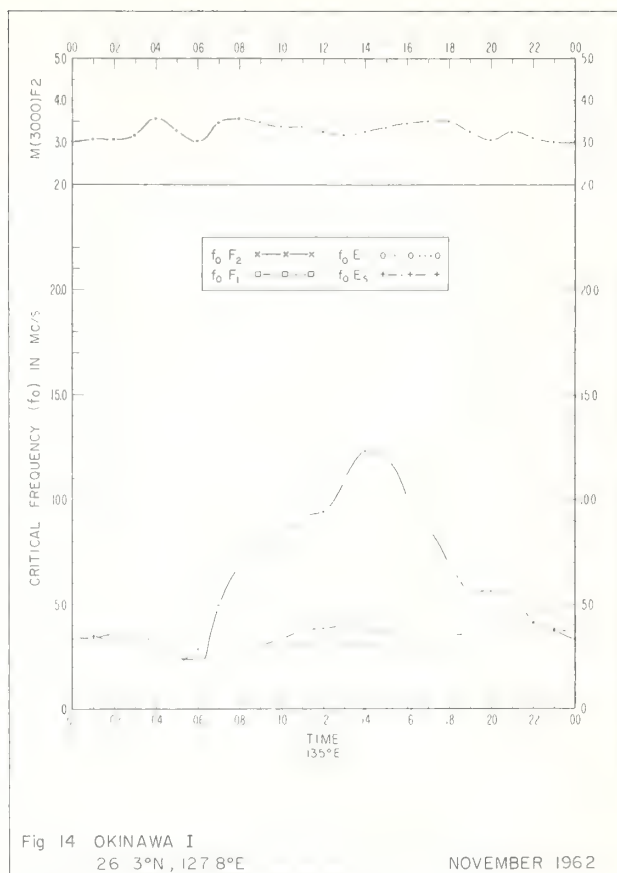
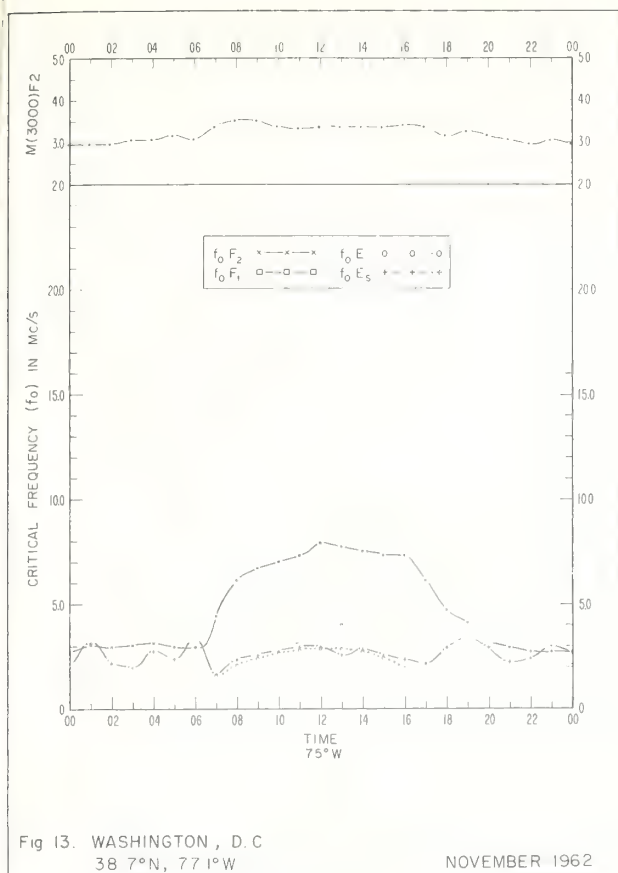


Fig. 12. NARSSARSSUAQ, GREENLAND  
61.2°N, 45.4°W

NOVEMBER 1962





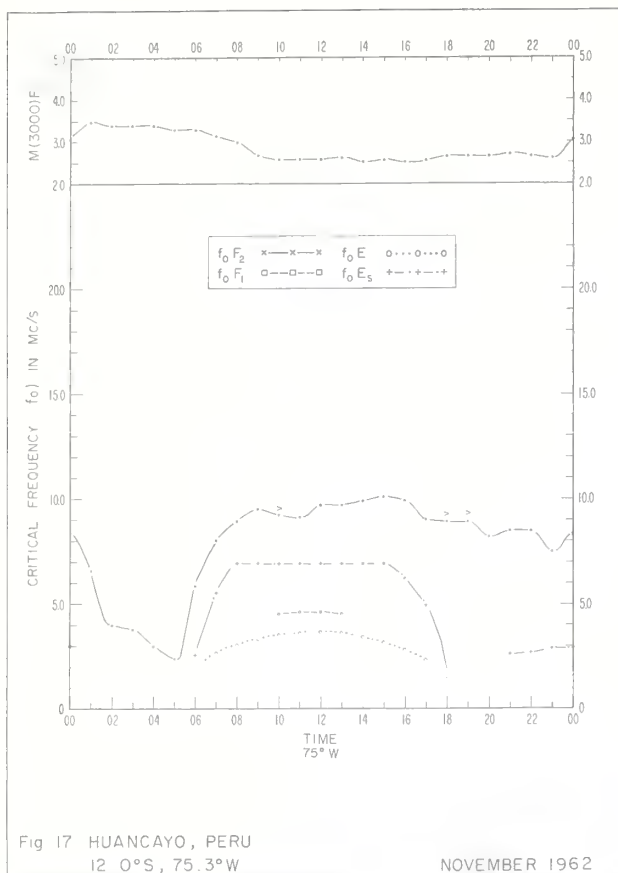


Fig 17 HUANCAYO, PERU  
12° 0'S, 75.3° W

NOVEMBER 1962

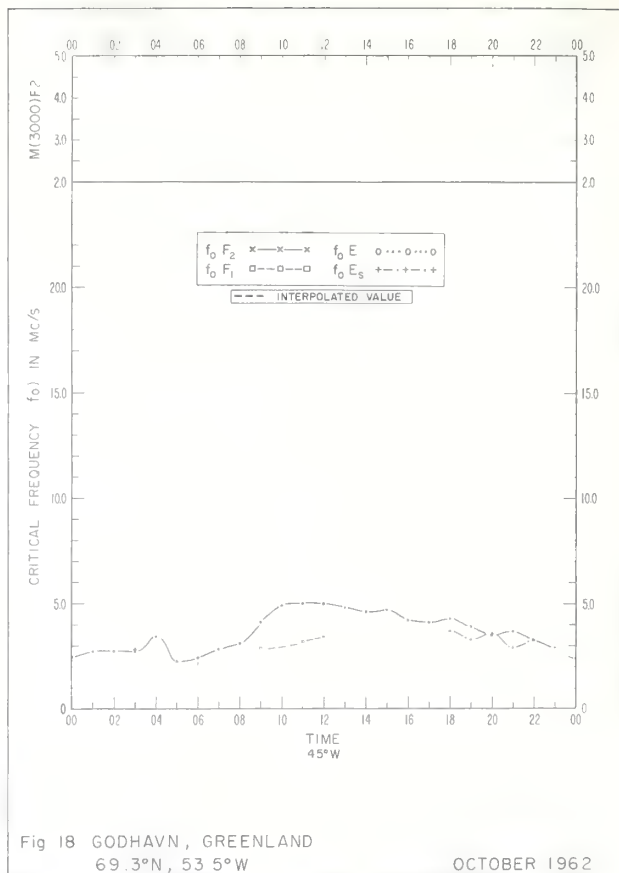


Fig 18 GODHAVN, GREENLAND  
69.3° N, 53.5° W

OCTOBER 1962

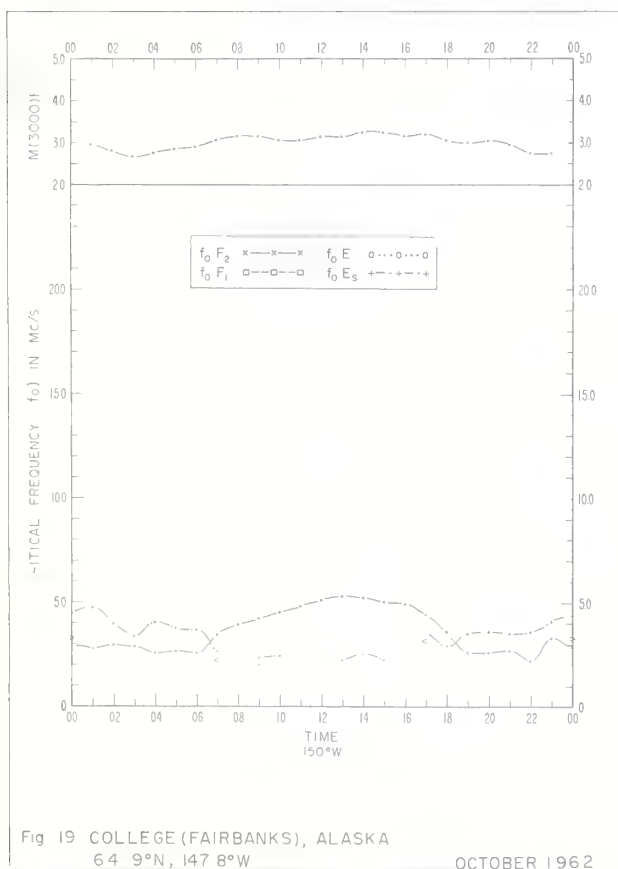


Fig 19 COLLEGE (FAIRBANKS), ALASKA  
64.9° N, 147.8° W

OCTOBER 1962

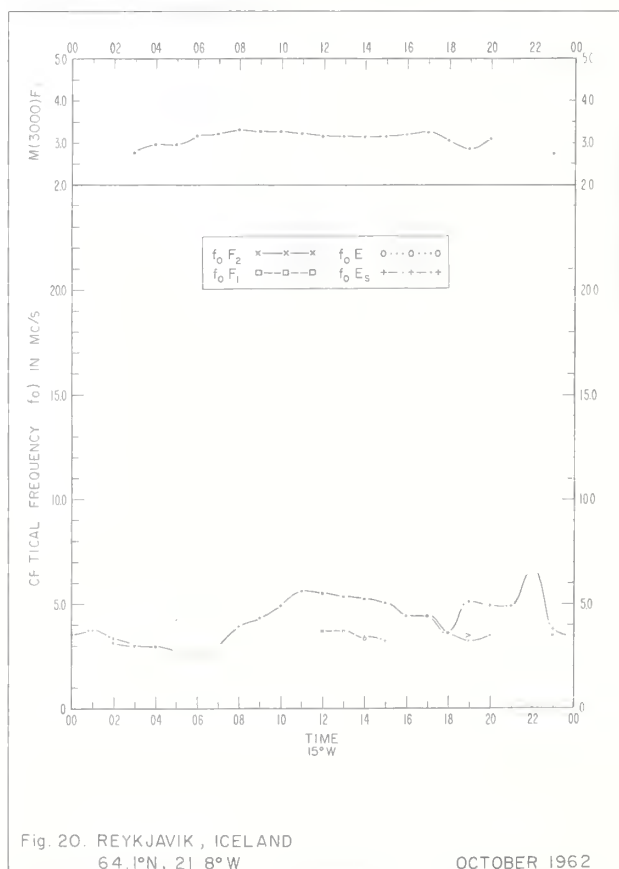
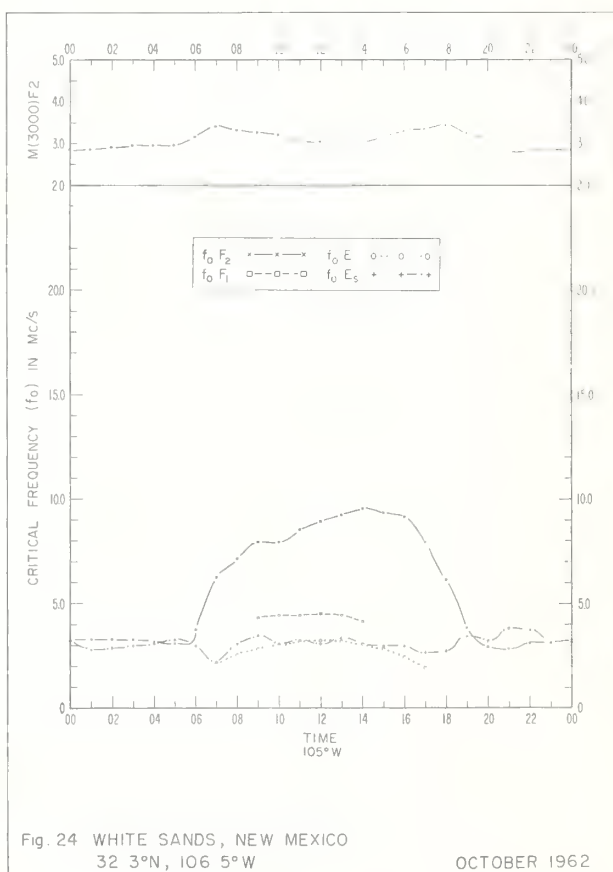
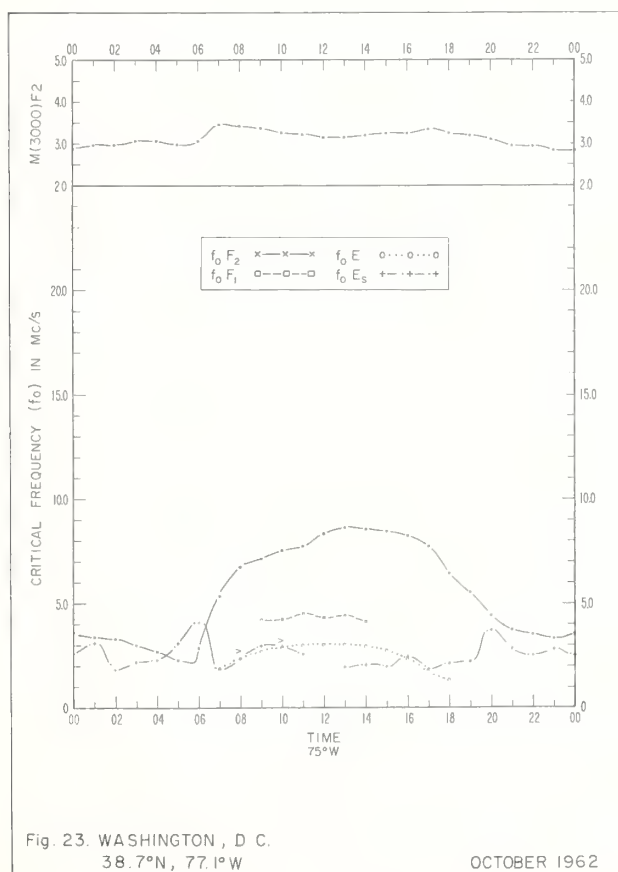
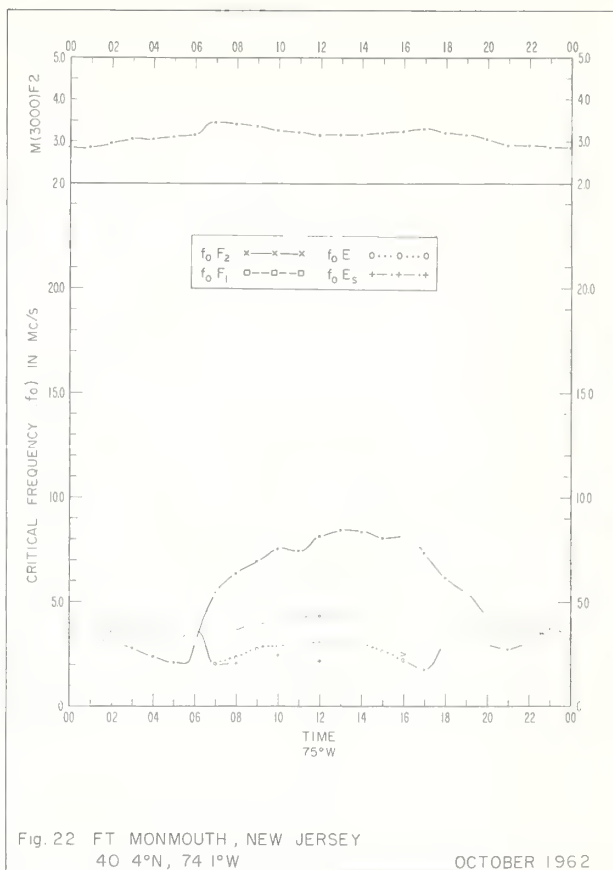
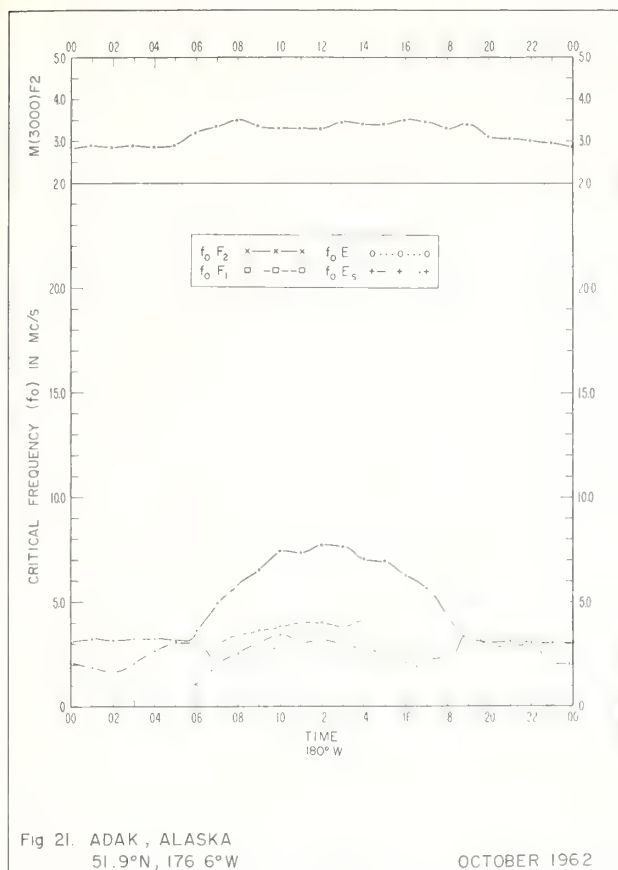
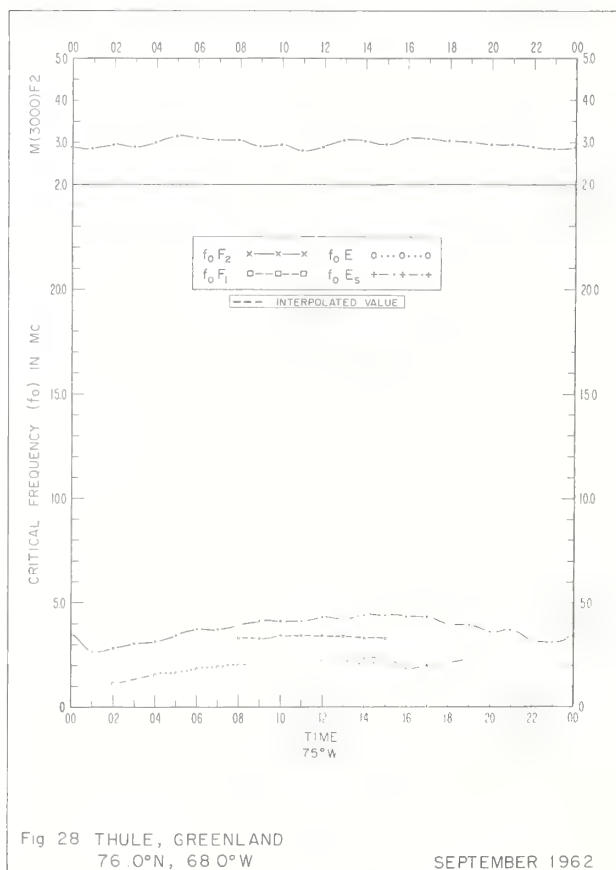
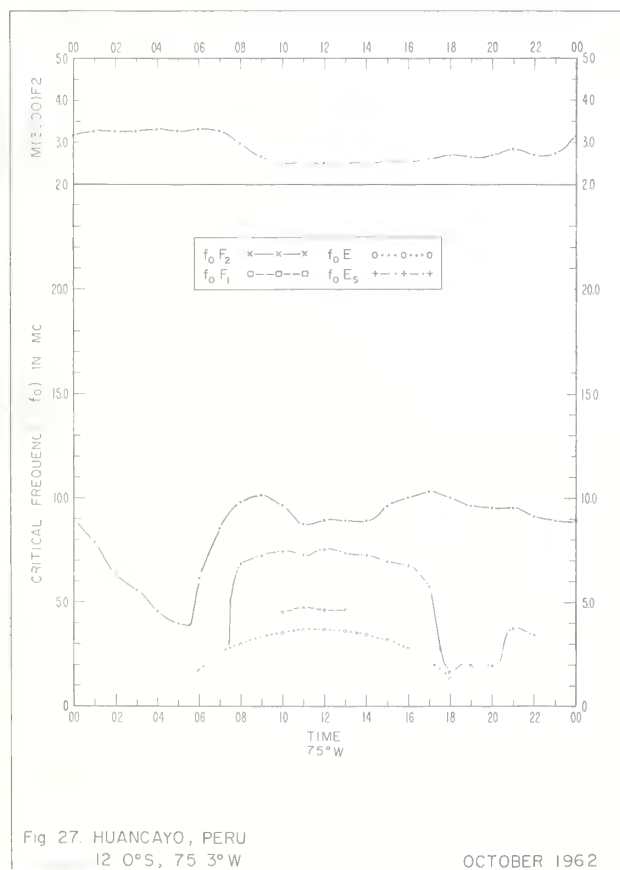
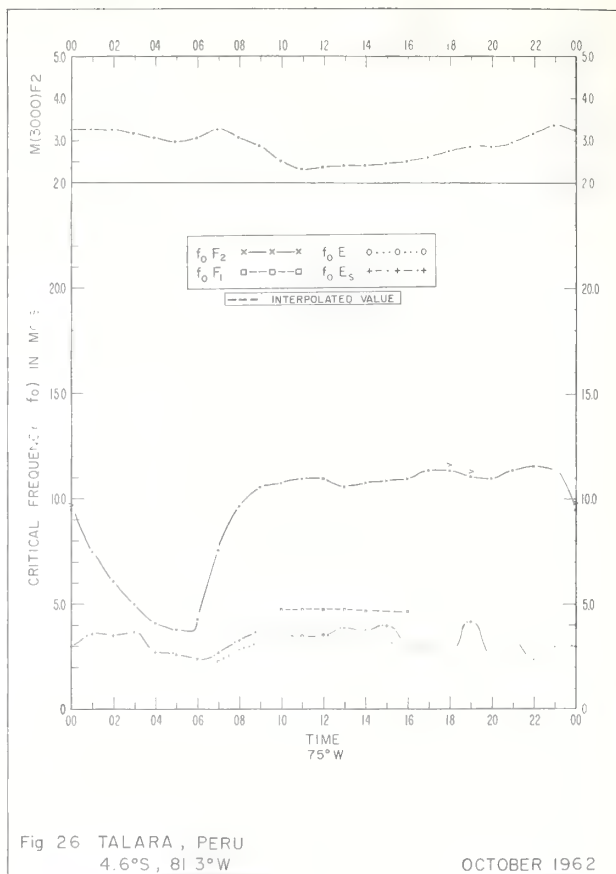
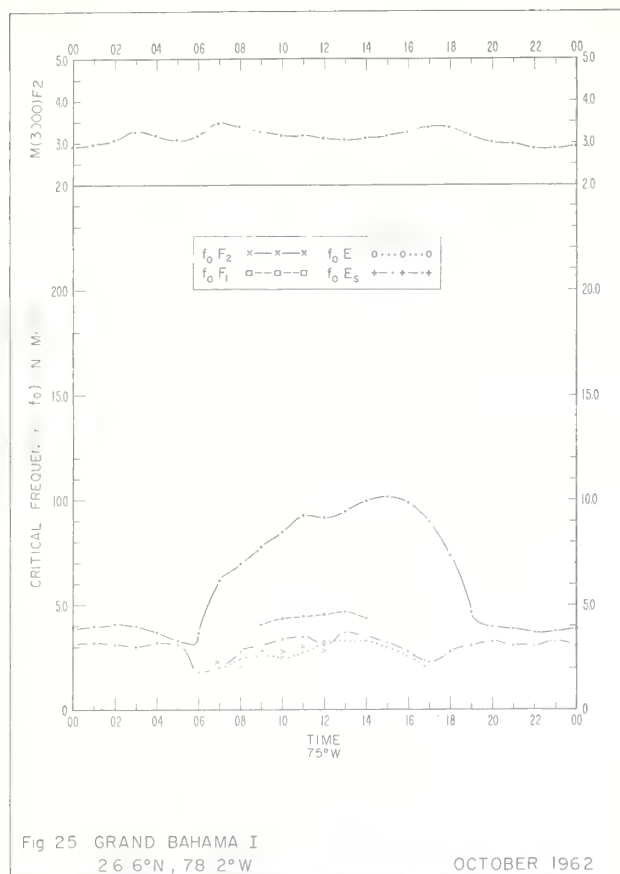


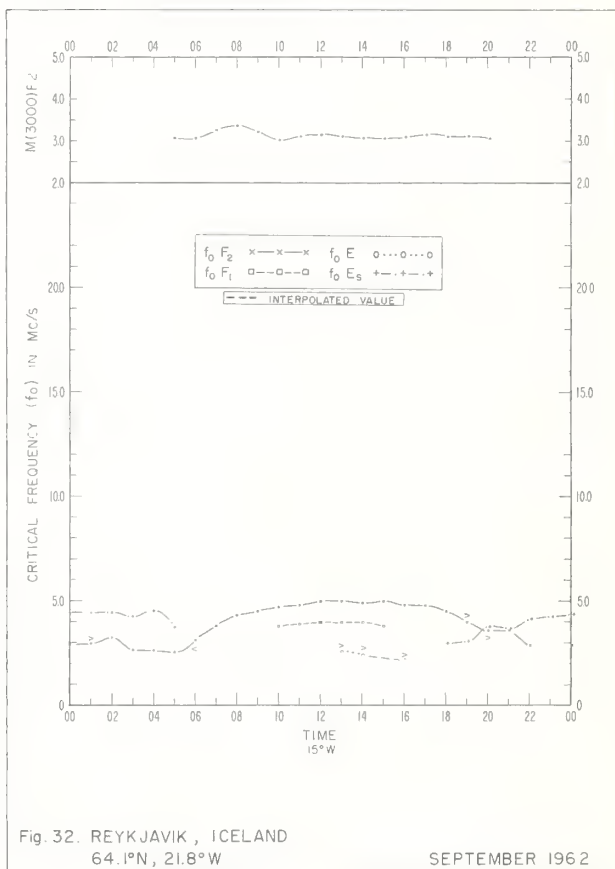
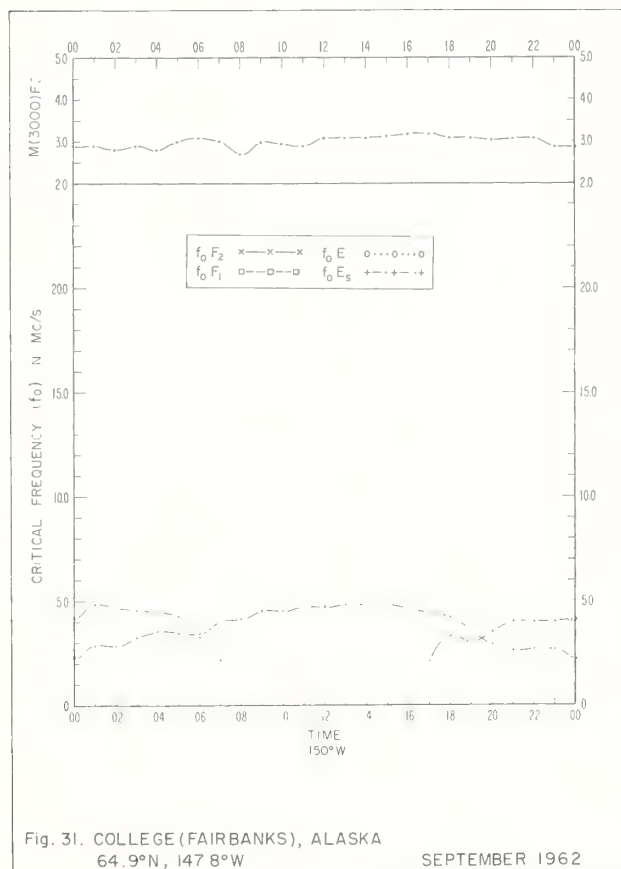
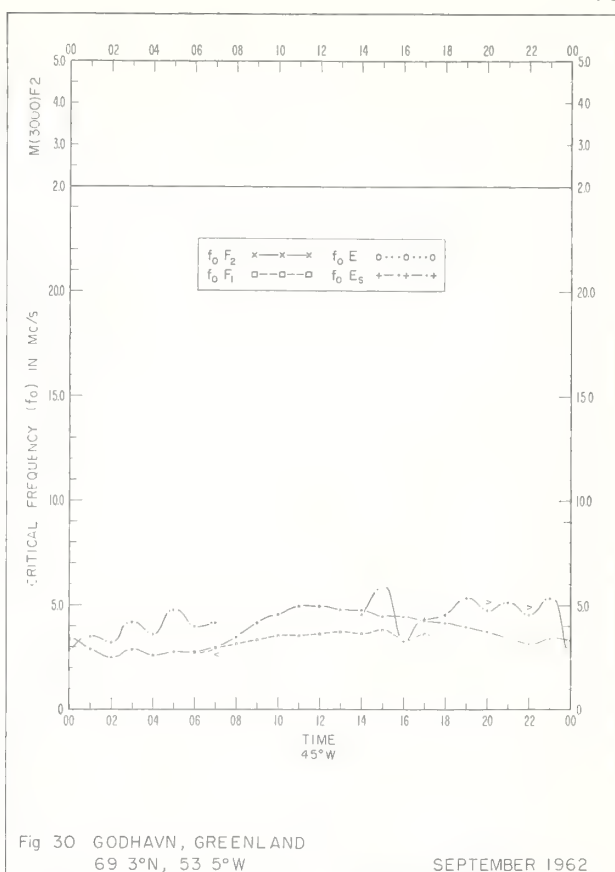
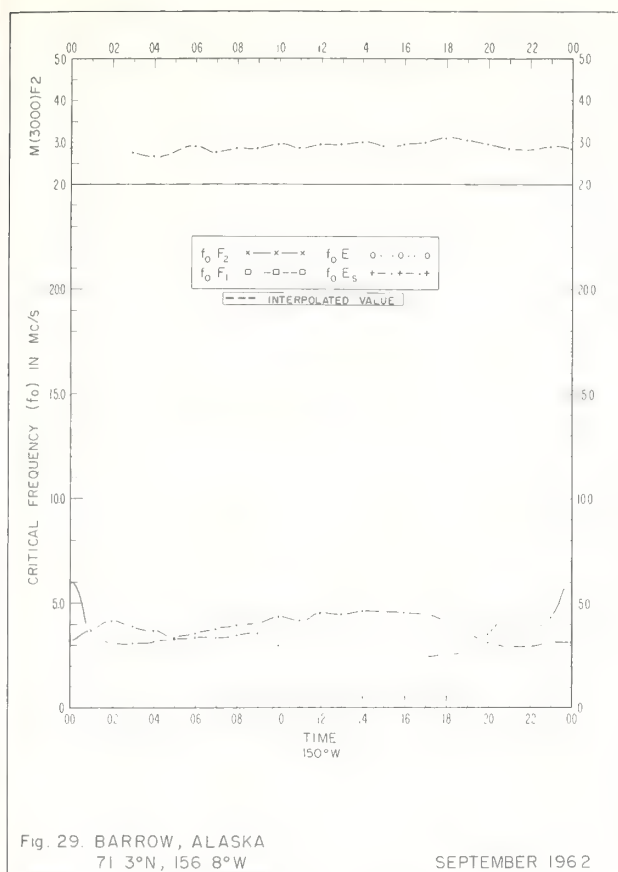
Fig 20 REYKJAVIK, ICELAND  
64.1° N, 21.8° W

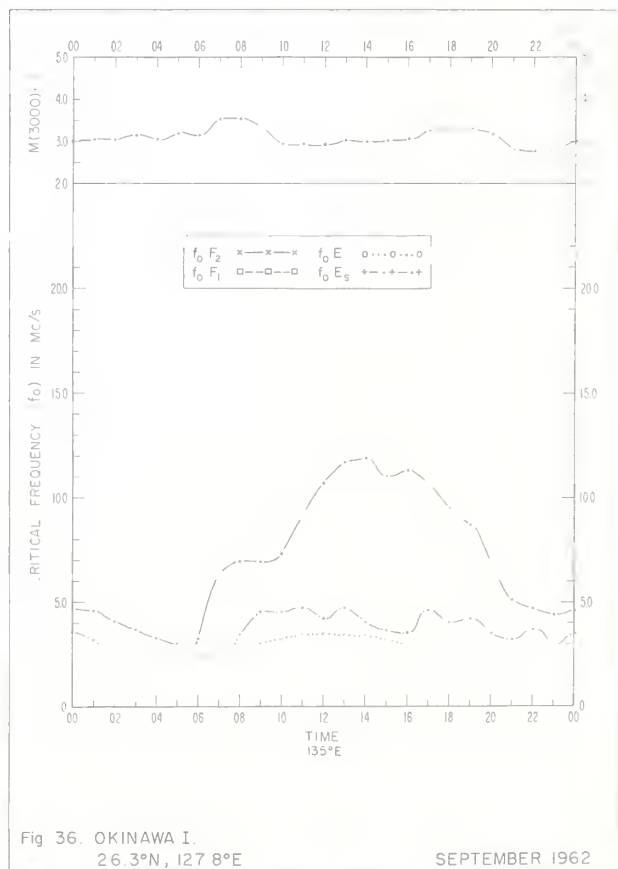
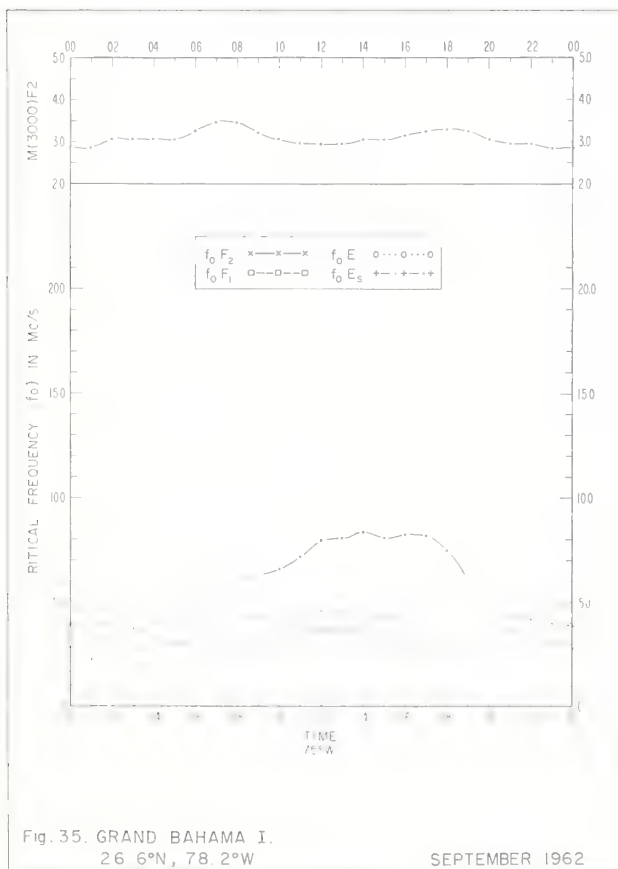
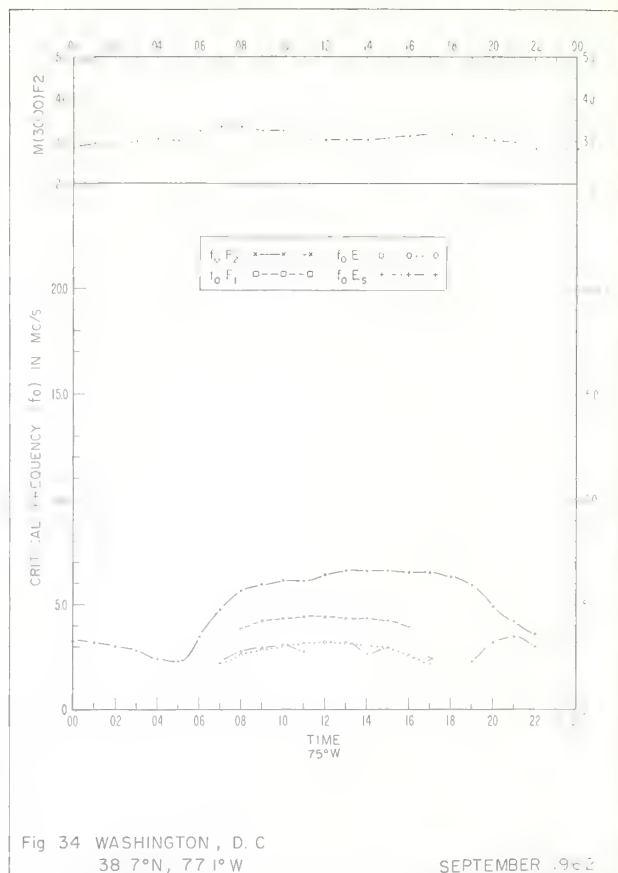
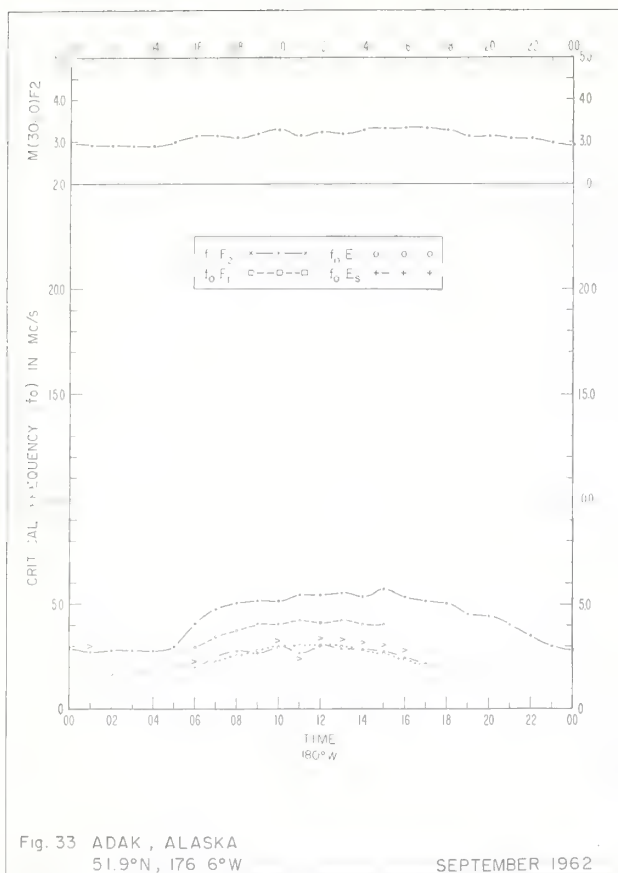
OCTOBER 1962

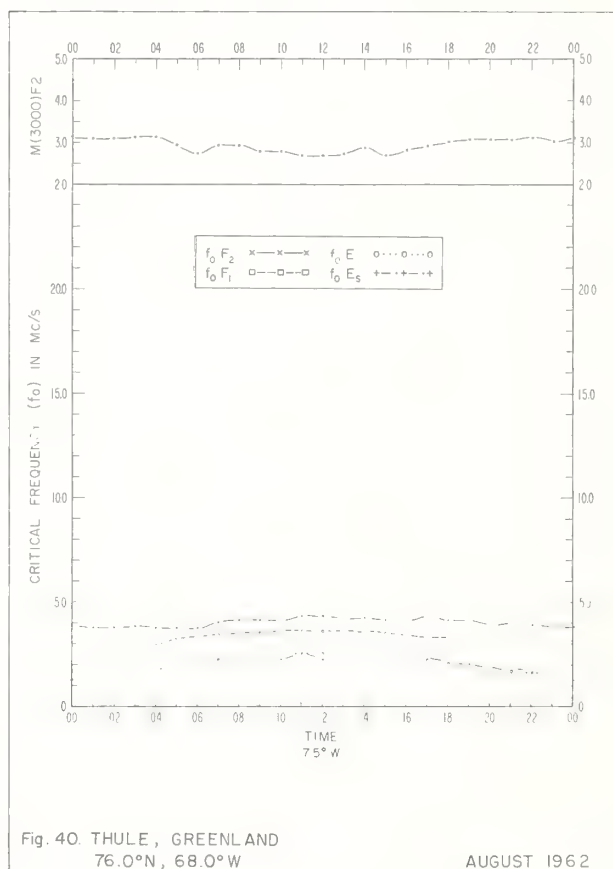
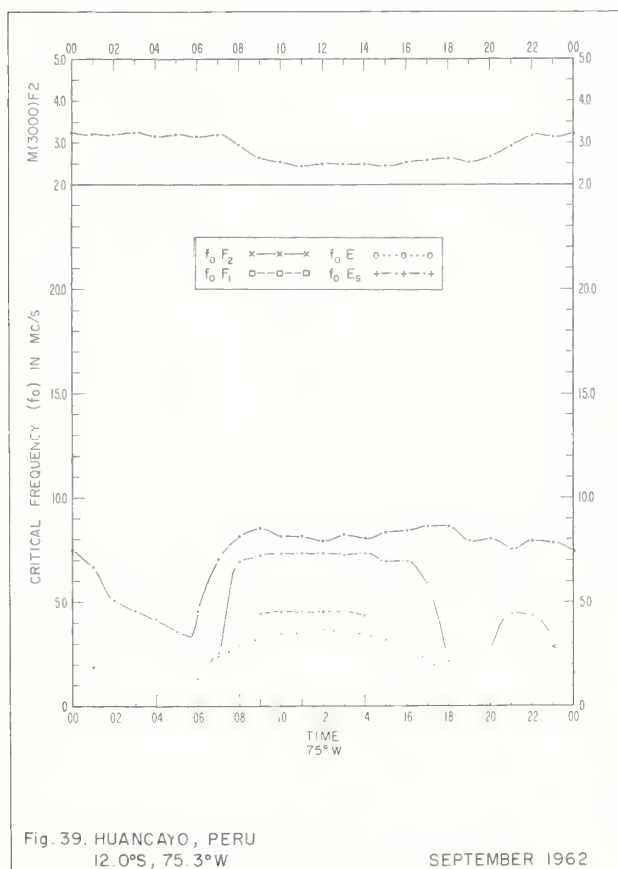
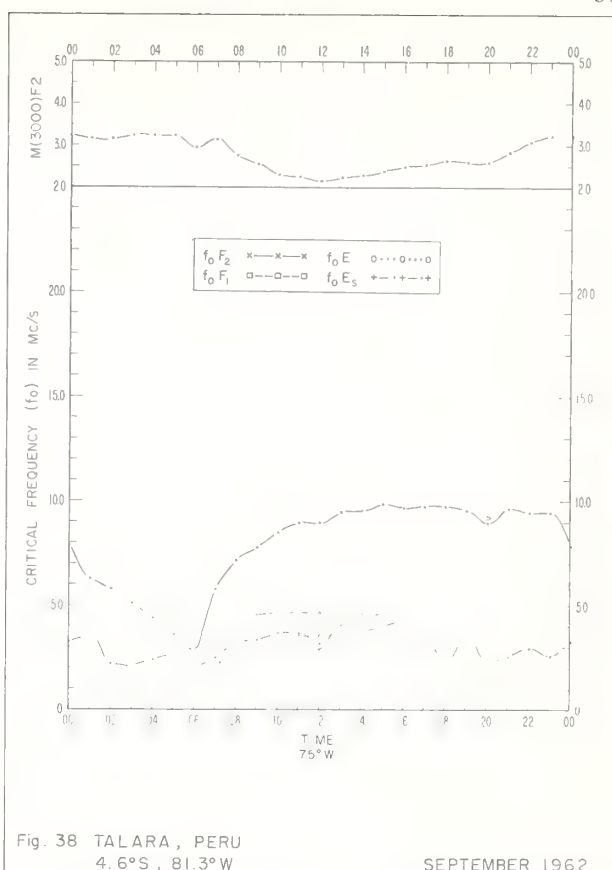
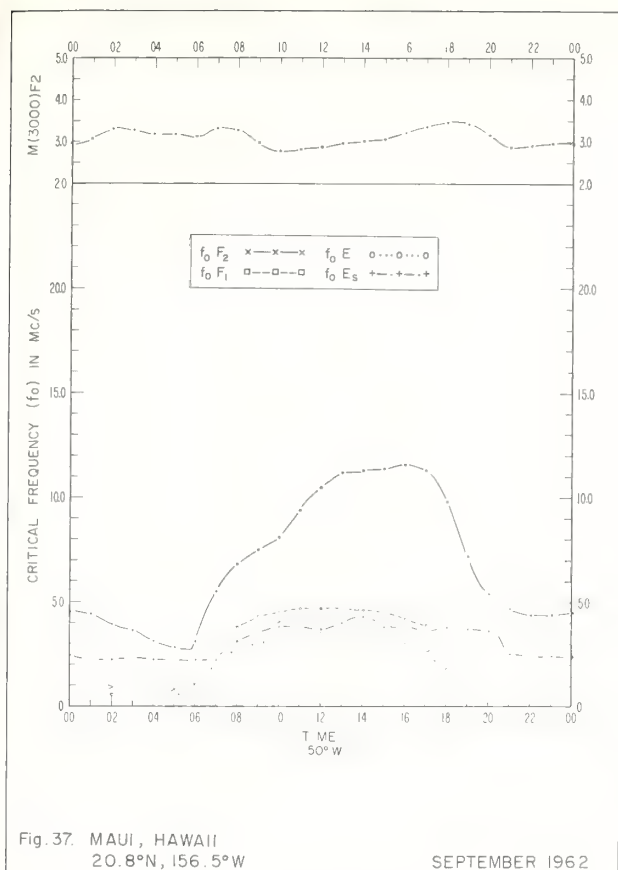


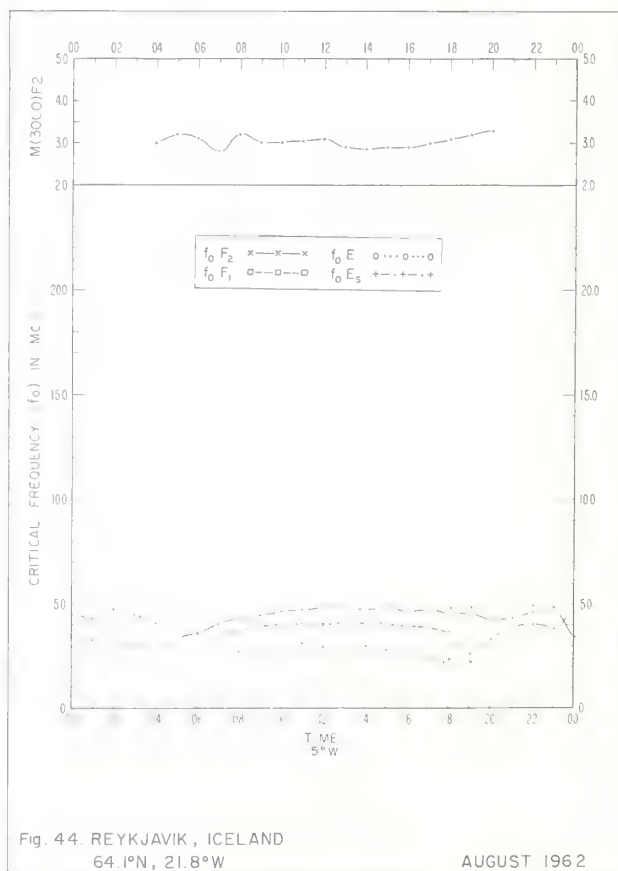
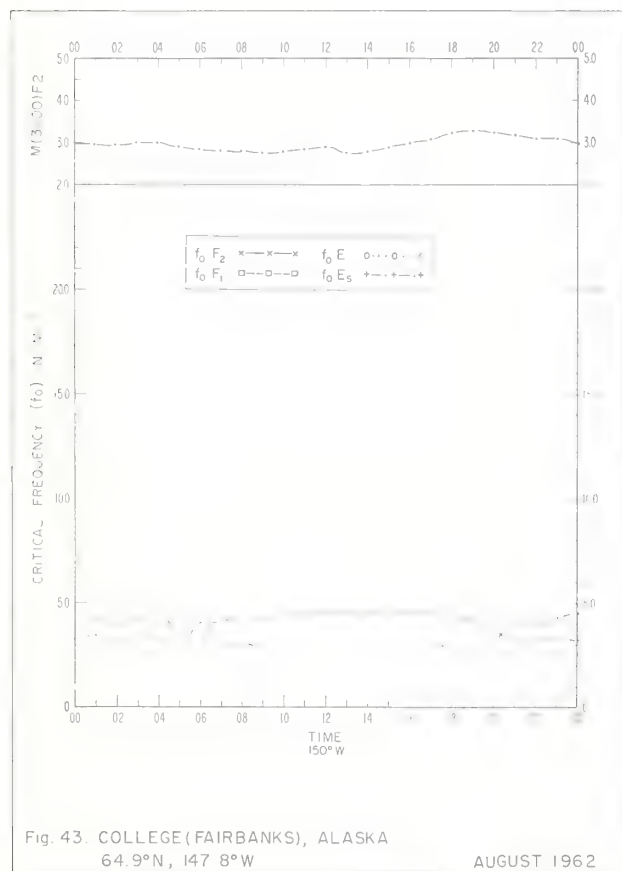
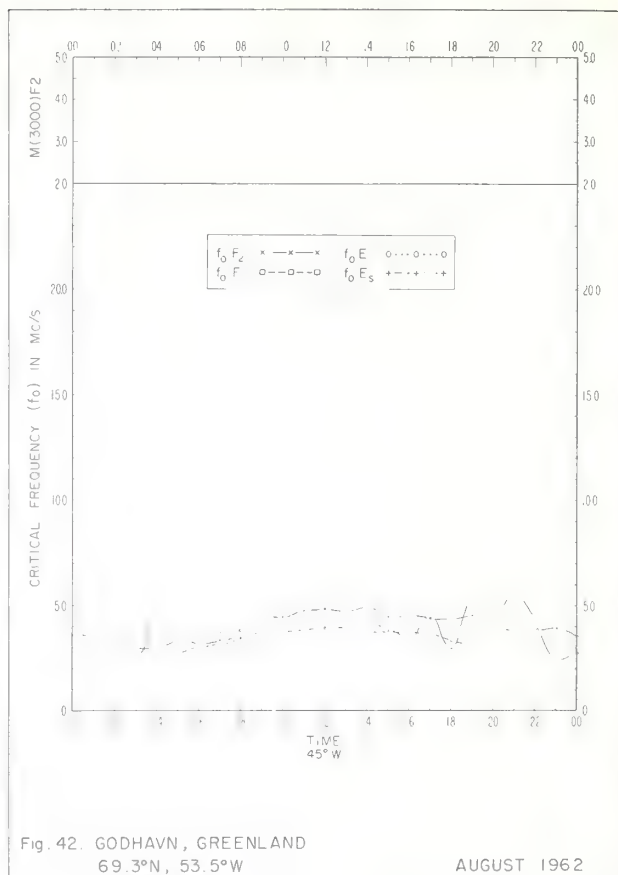
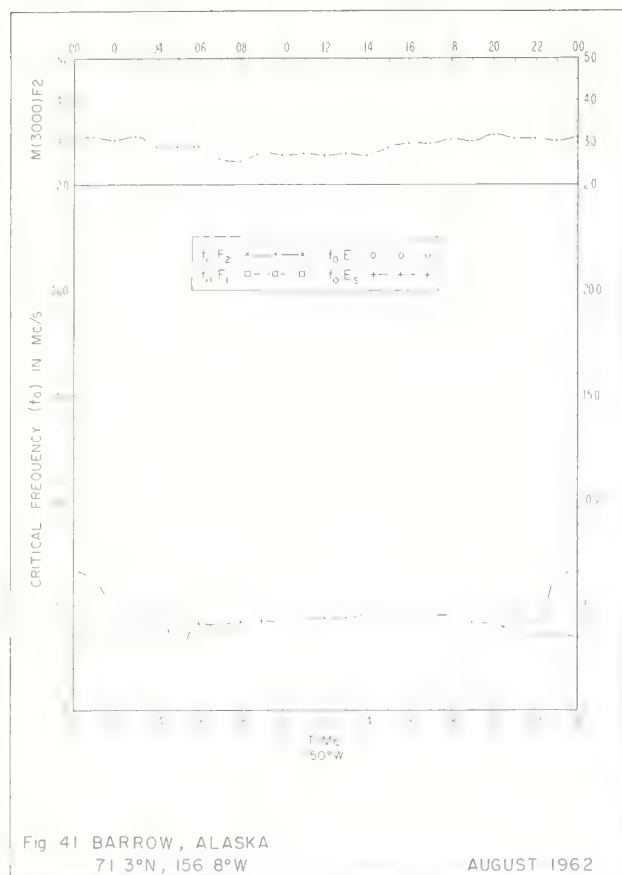




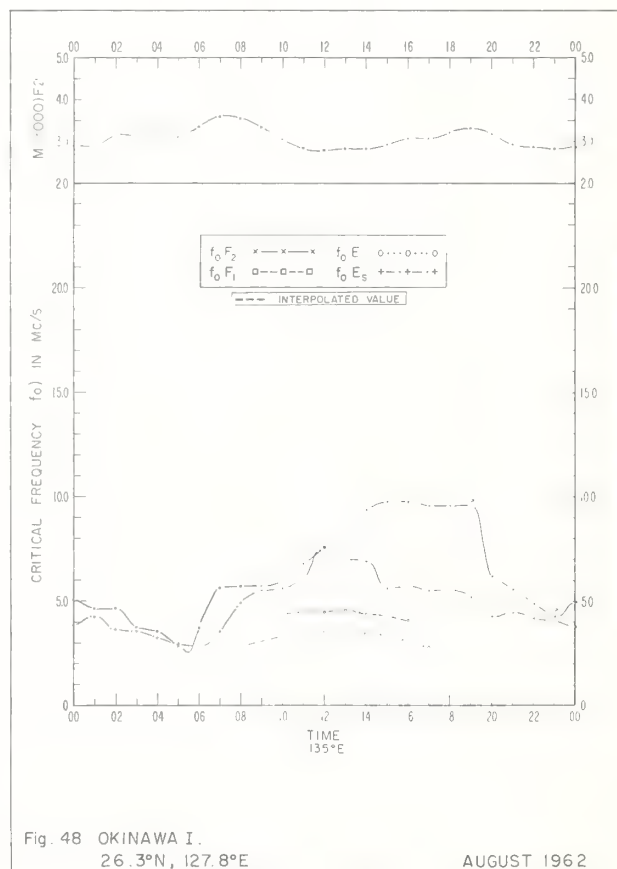
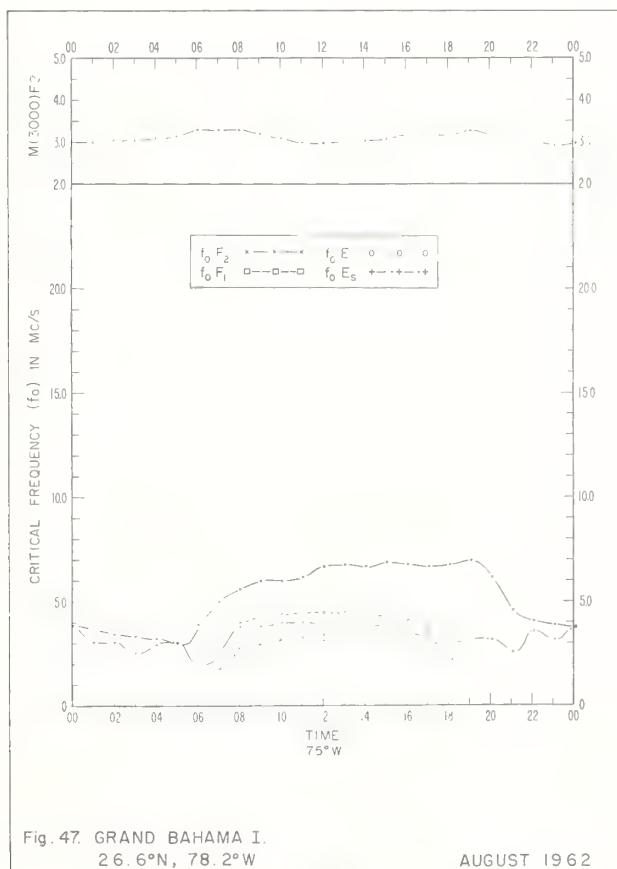
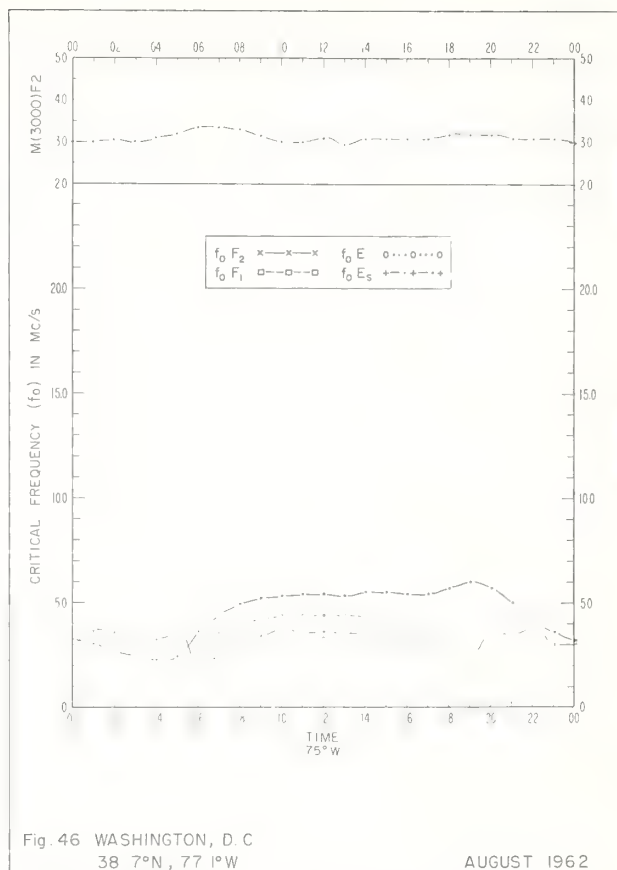
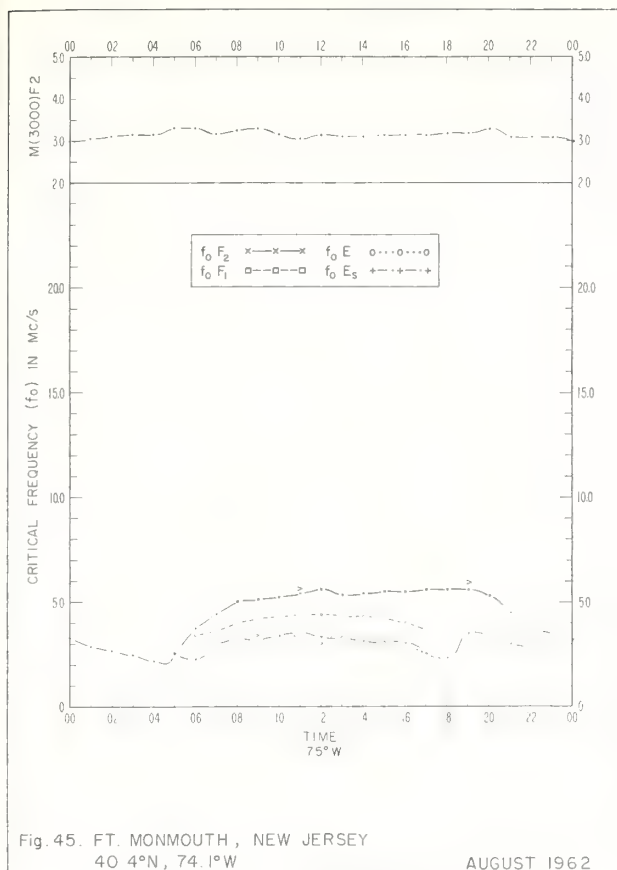












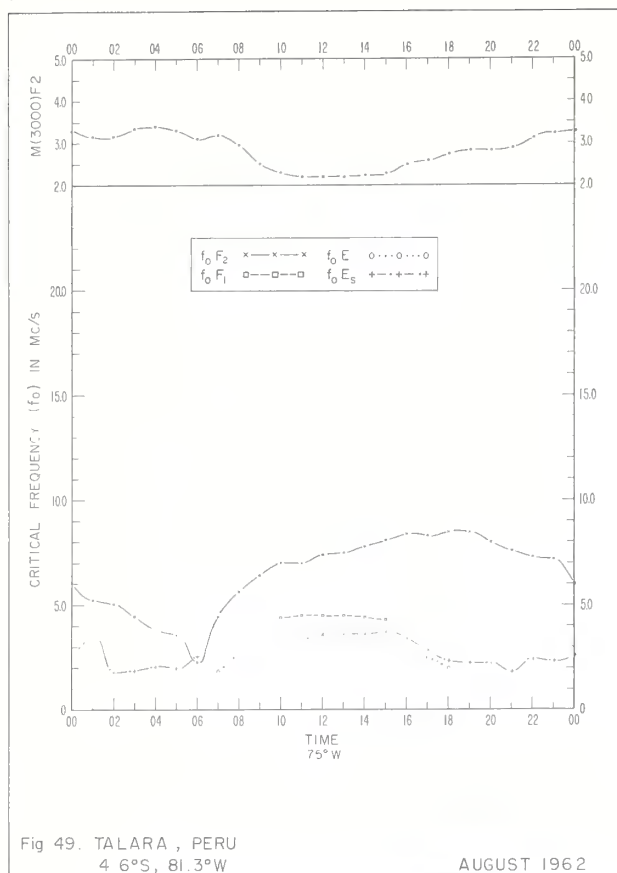


Fig 49. TALARA, PERU  
4 6°S, 81.3°W

AUGUST 1962

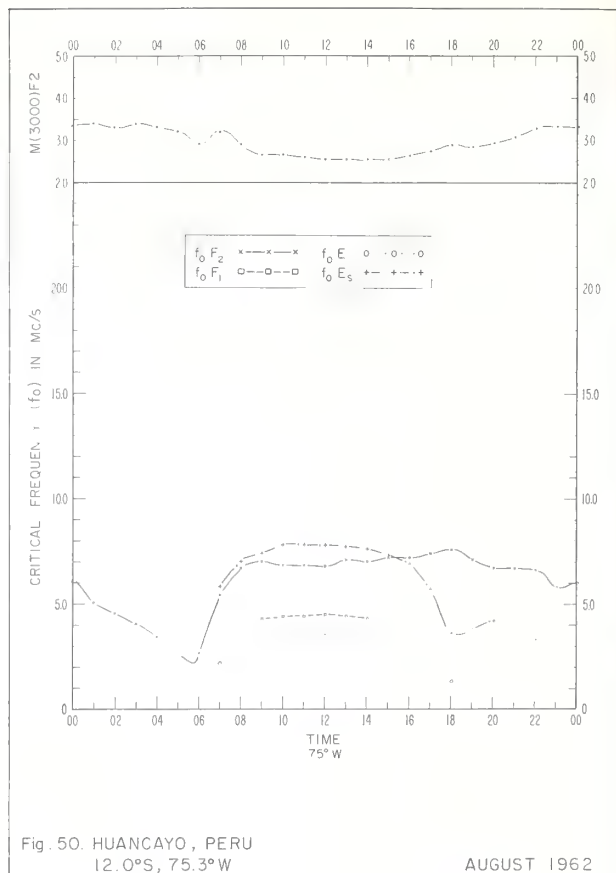


Fig 50. HUANCAYO, PERU  
12.0°S, 75.3°W

AUGUST 1962

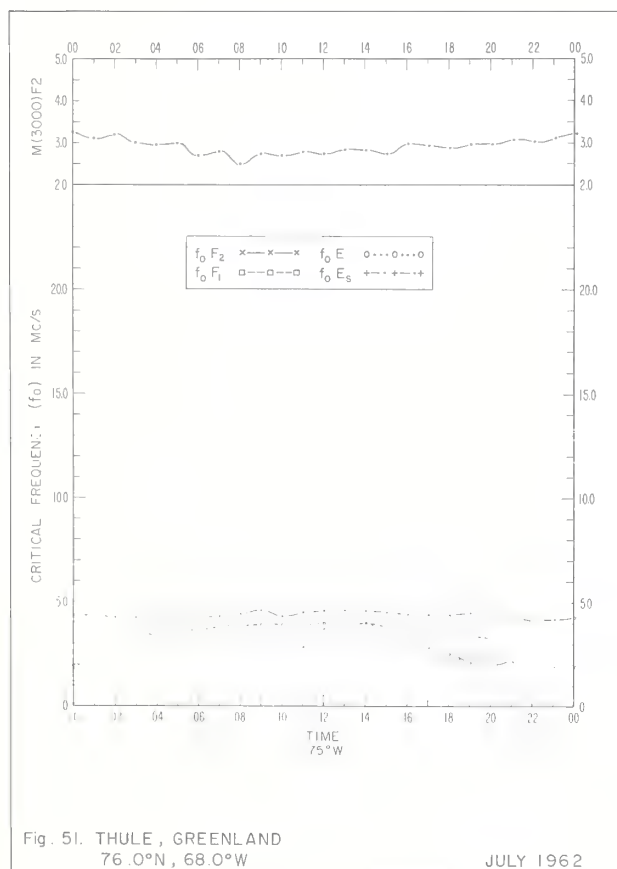


Fig 51. THULE, GREENLAND  
76.0°N, 68.0°W

JULY 1962

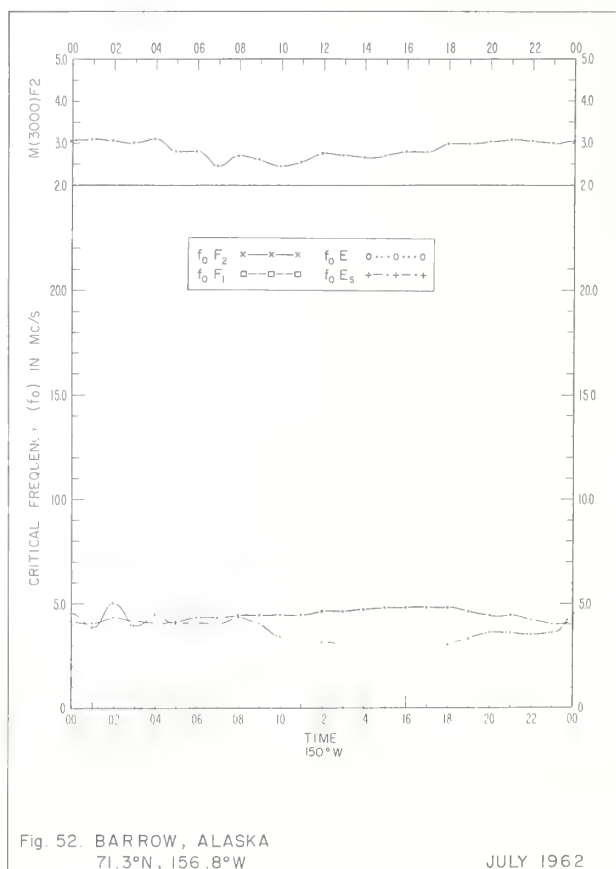
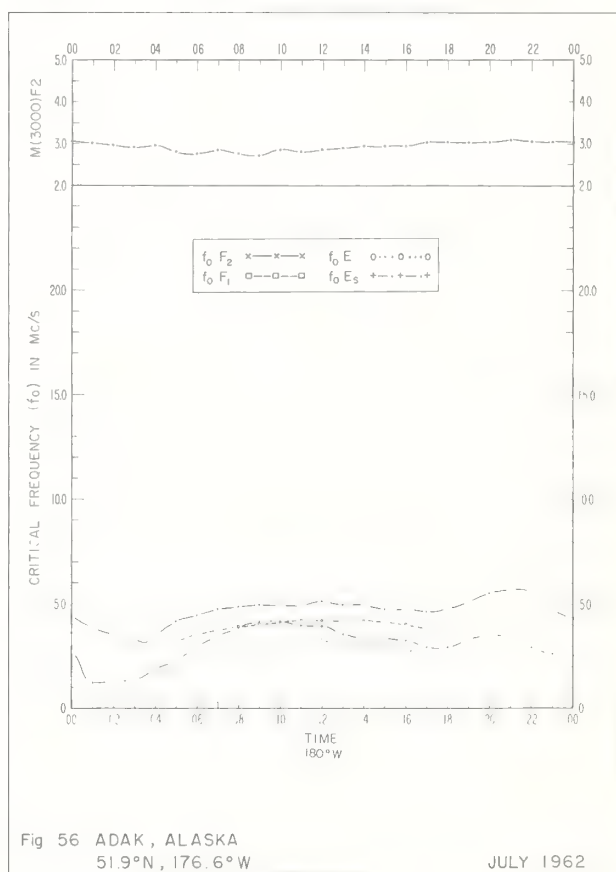
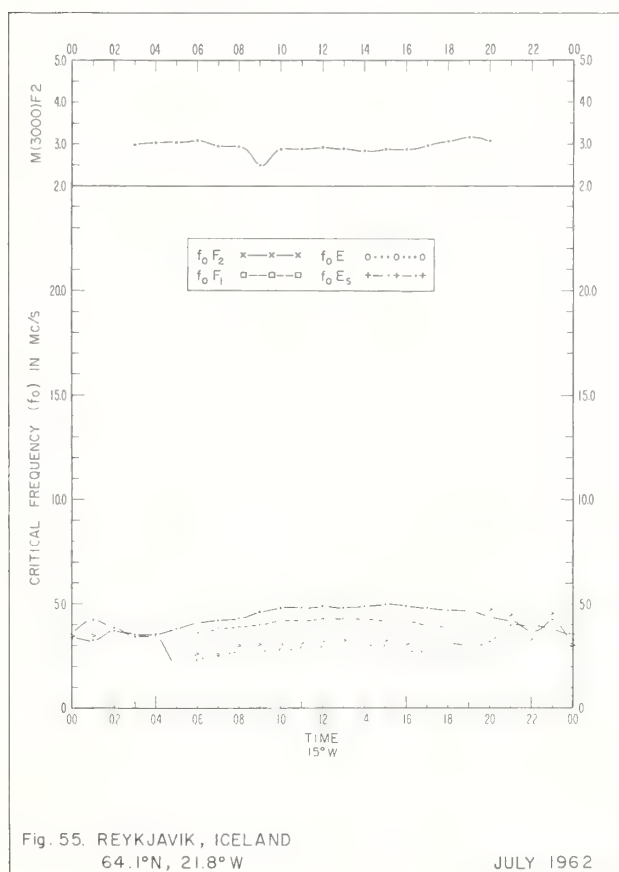
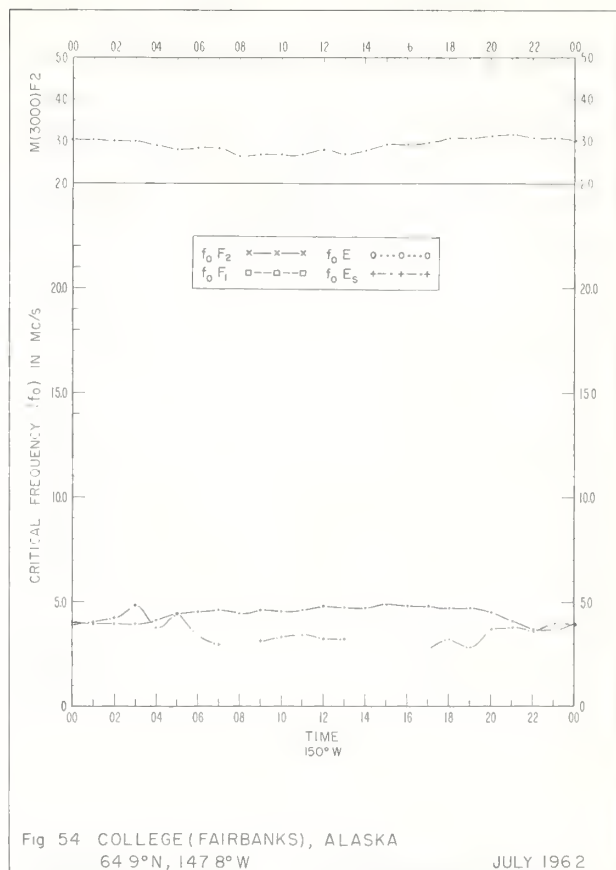
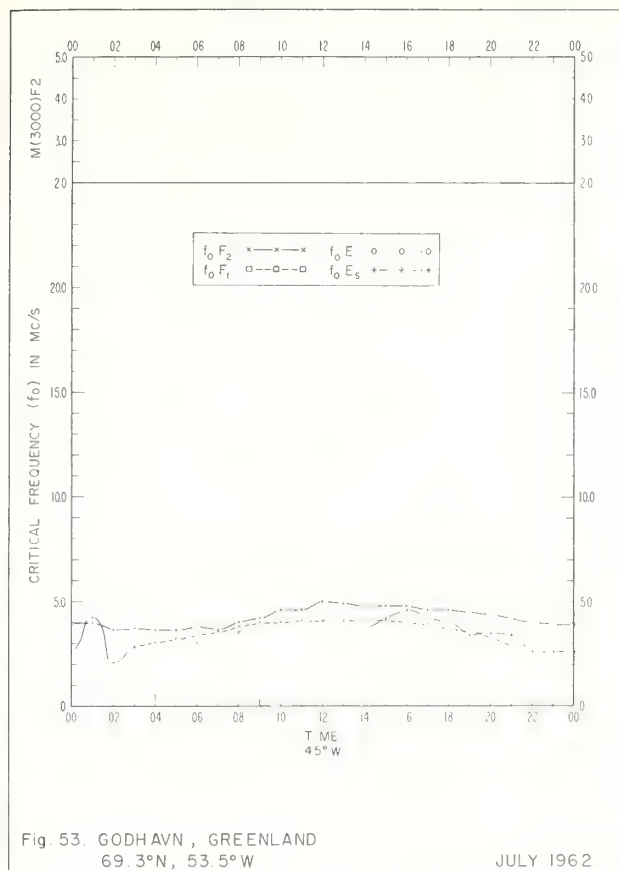


Fig 52. BARROW, ALASKA  
71.3°N, 156.8°W

JULY 1962



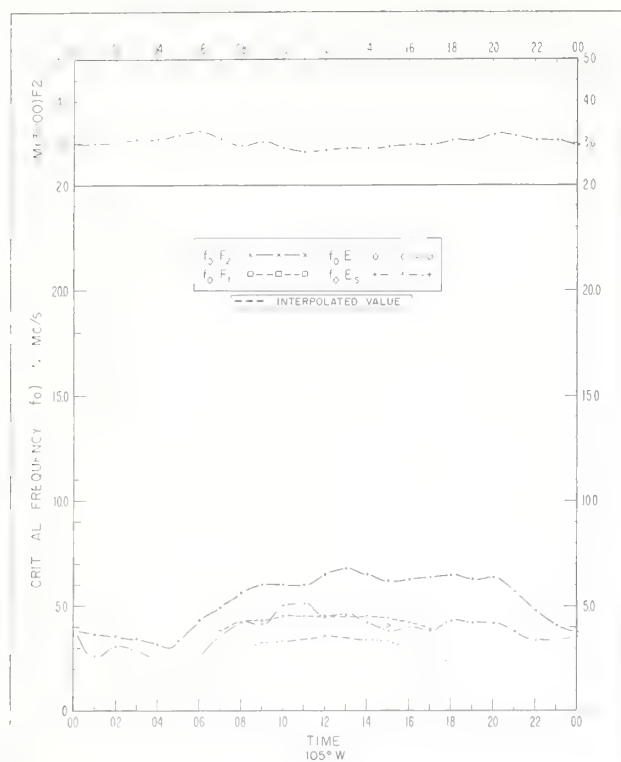


Fig 57. WHITE SANDS, NEW MEXICO  
32°3'N, 106°5'W

JULY 1962

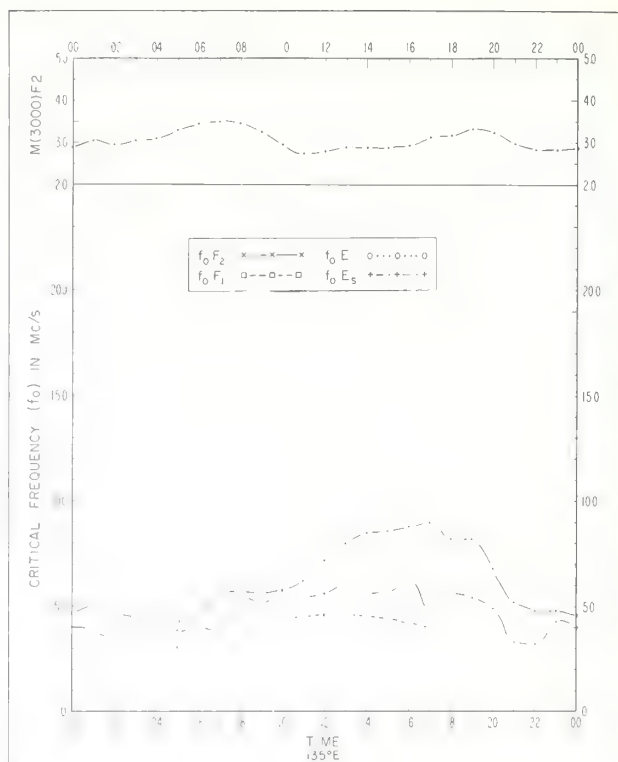


Fig 58. OKINAWA I.  
26°3'N, 127°8'E

JULY 1962

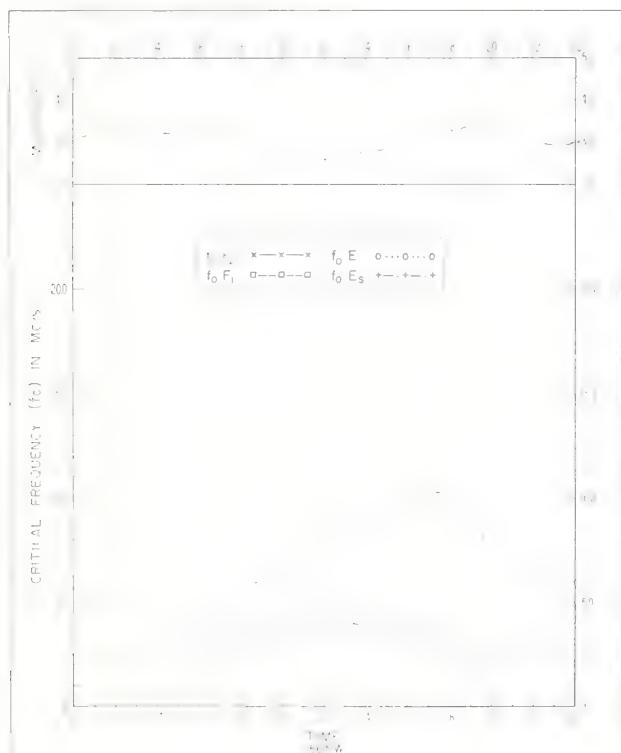


Fig 59. MAUI, HAWAII  
20°8'N, 156°5'W

JULY 1962

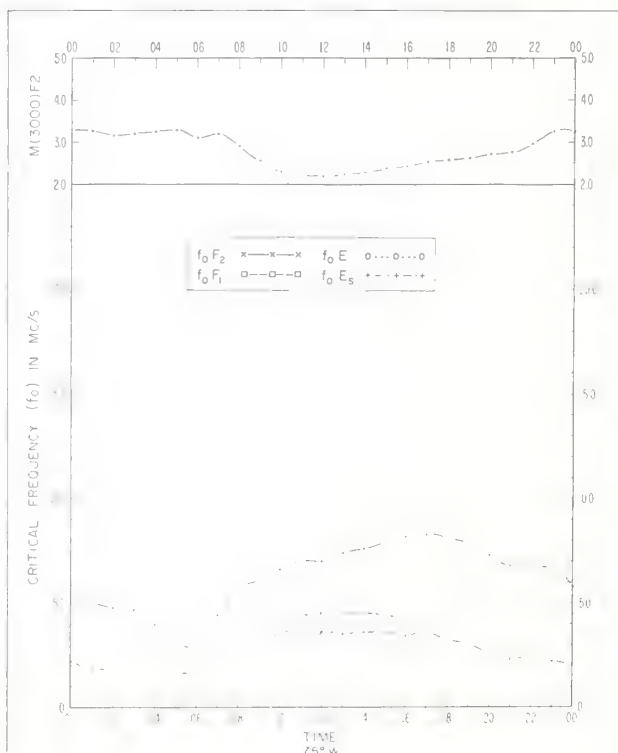
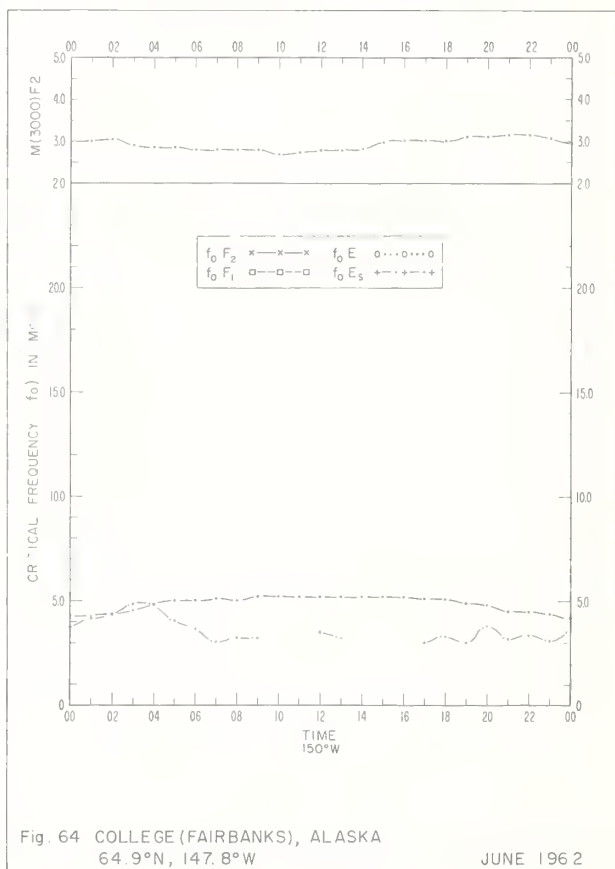
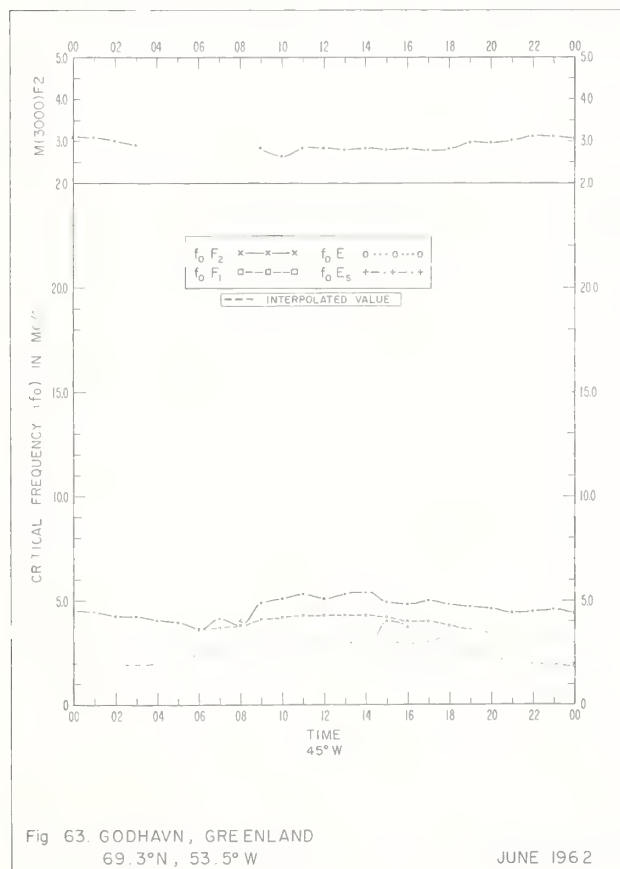
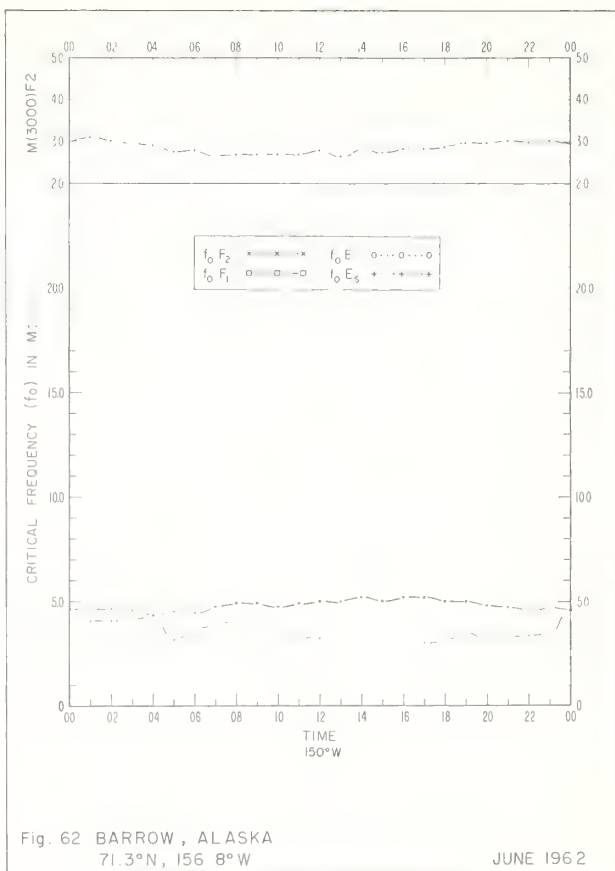
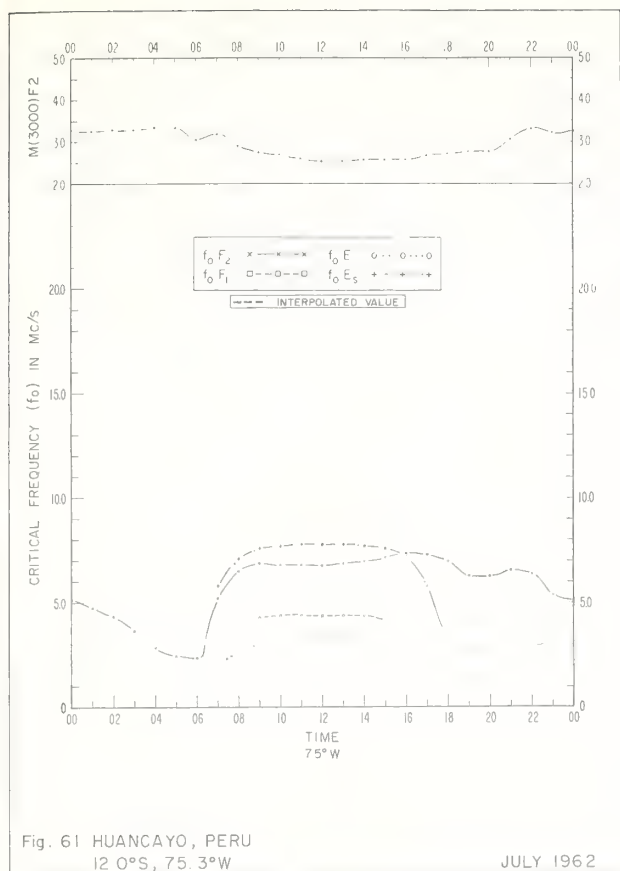
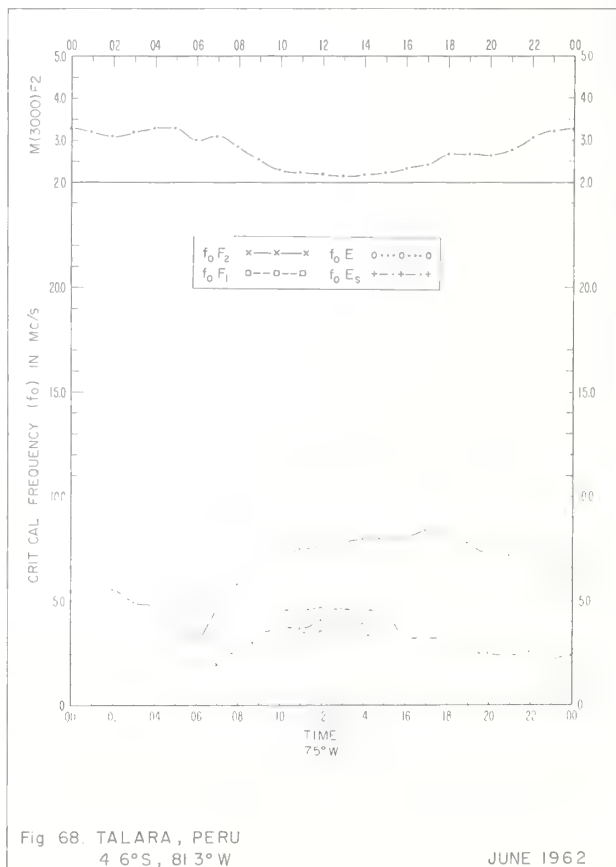
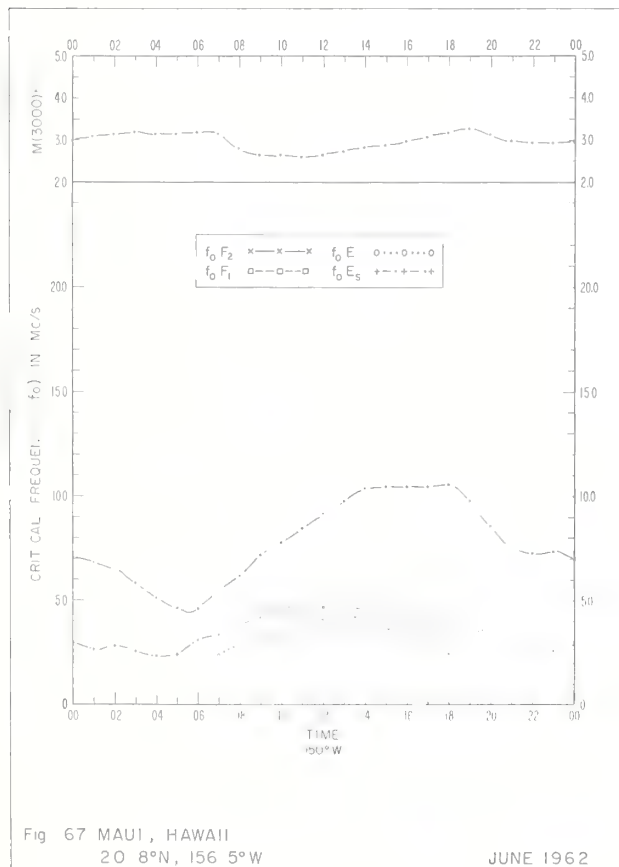
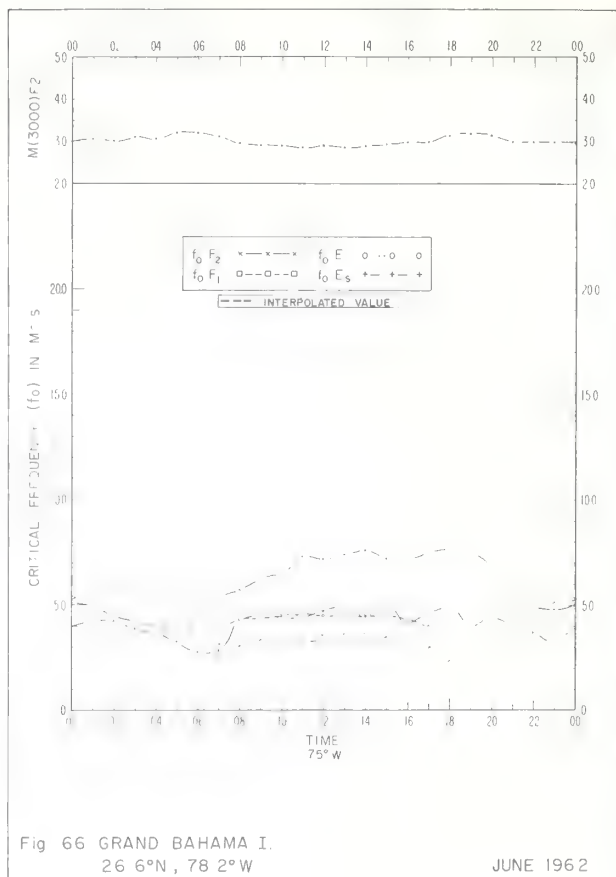
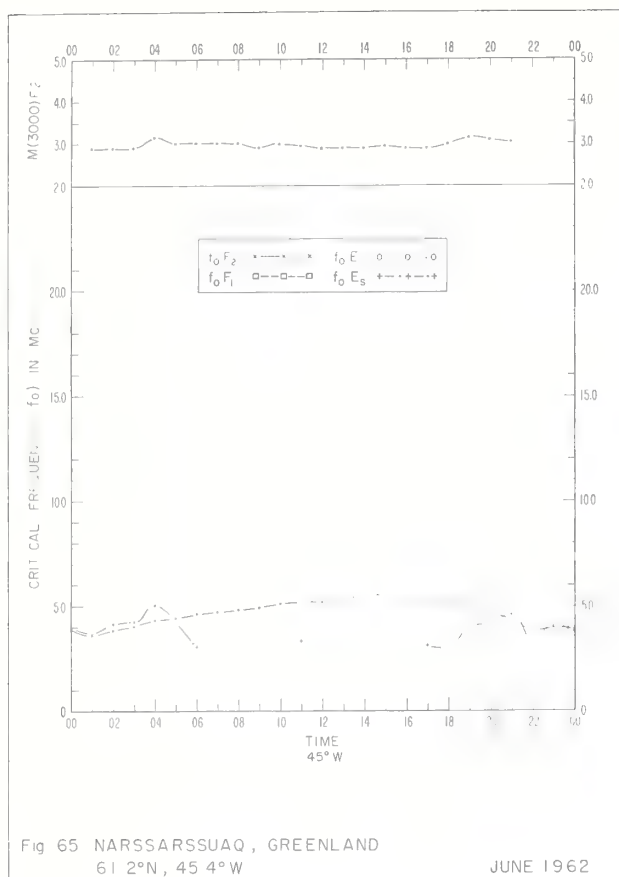


Fig 60. TALARA, PERU  
4°6'S, 81°3'W

JULY 1962







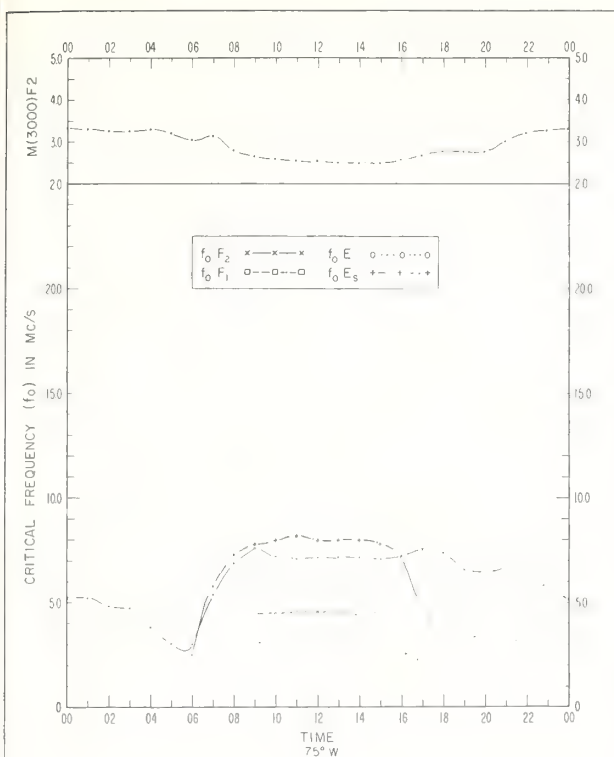


Fig. 69 HUANCAYO, PERU  
12.0°S, 75.3°W

JUNE 1962

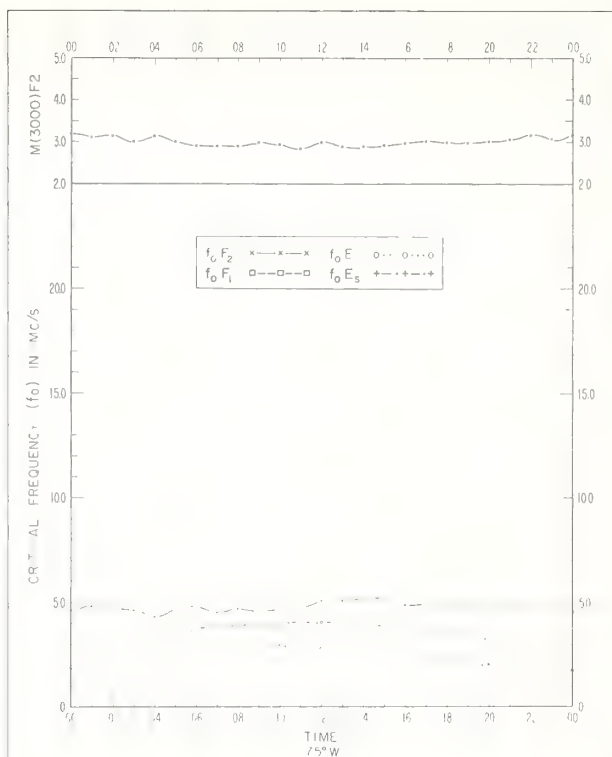


Fig. 70. THULE, GREENLAND  
76.0°N, 68.0°W

MAY 1962

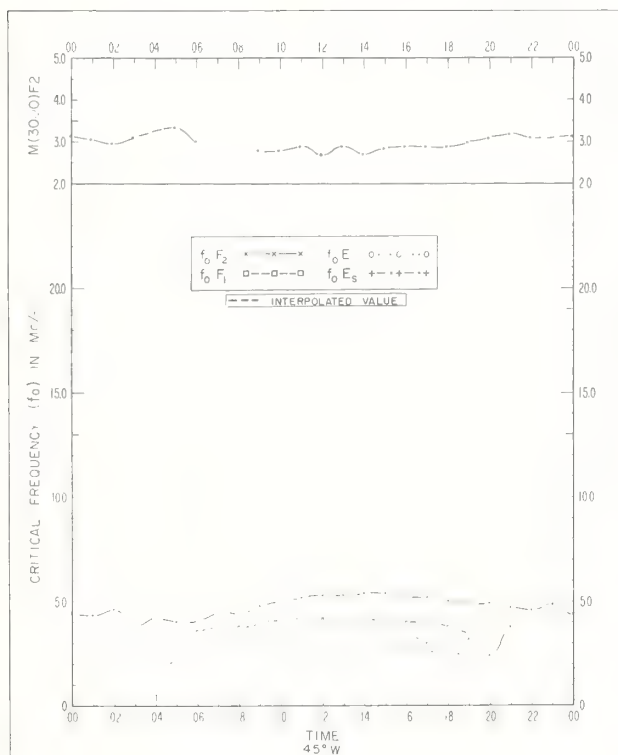


Fig. 71 GODHAVN, GREENLAND  
69.3°N, 53.5°W

MAY 1962

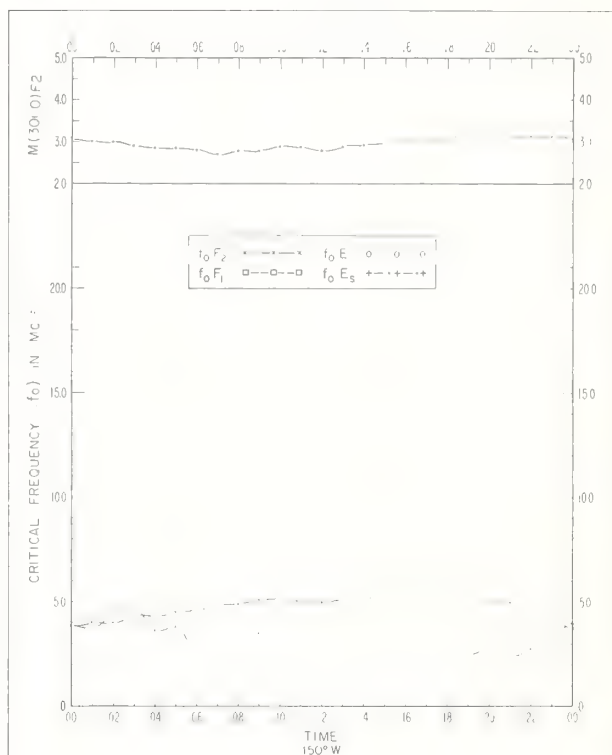
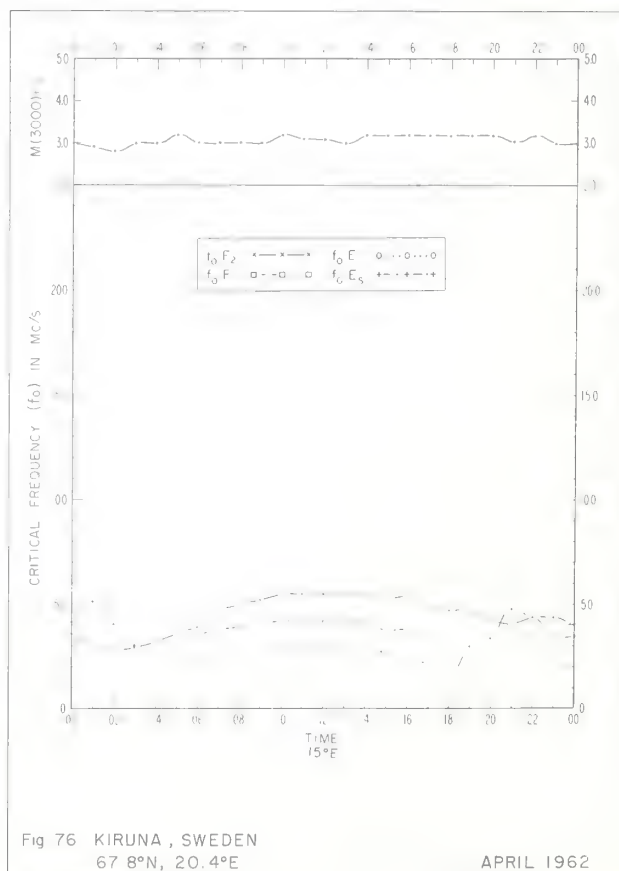
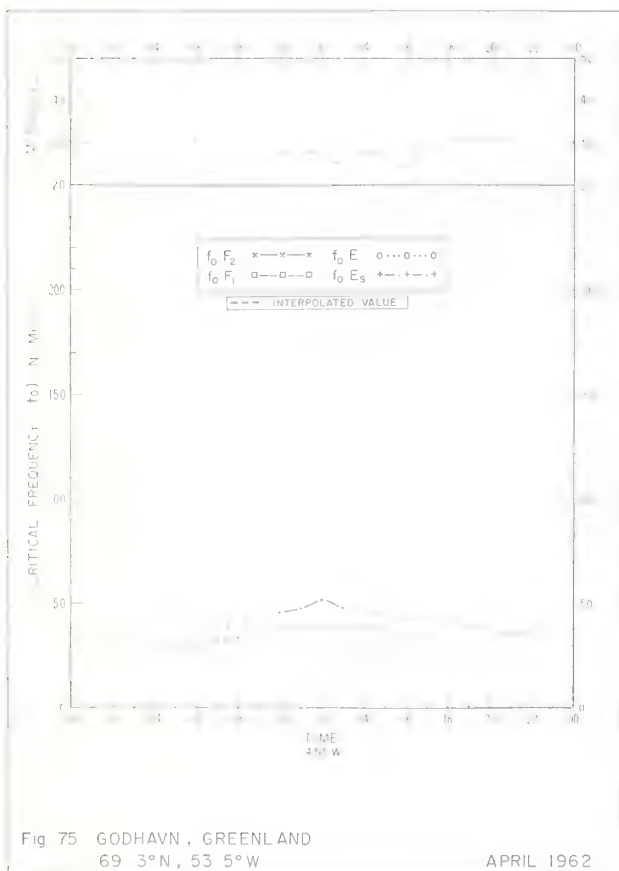
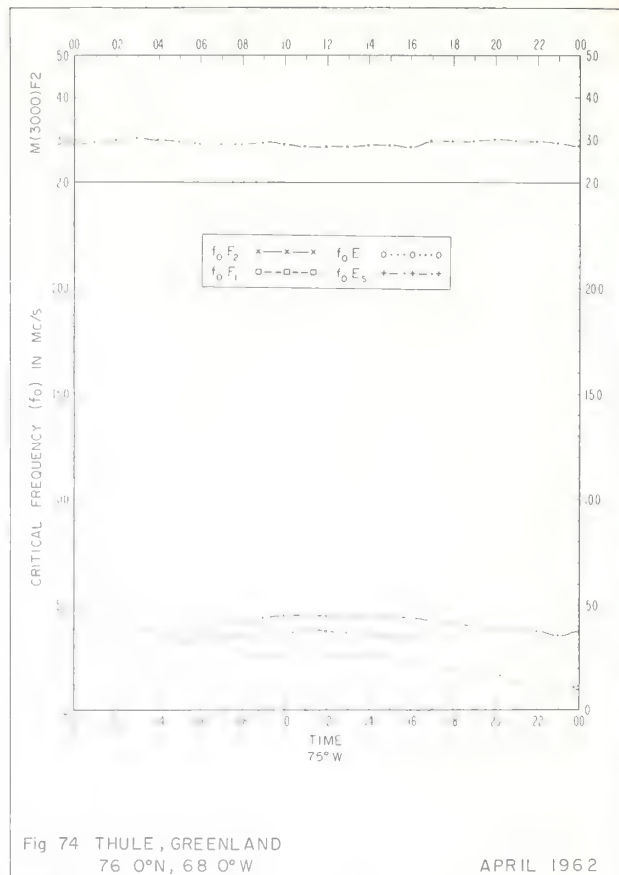
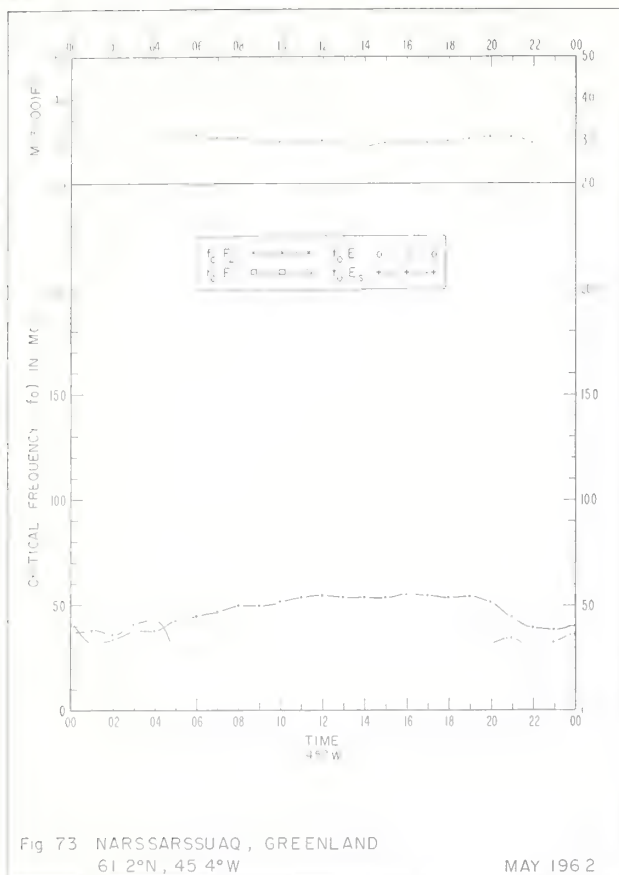


Fig. 72. COLLEGE (FAIRBANKS), ALASKA  
64.9°N, 147.8°W

MAY 1962





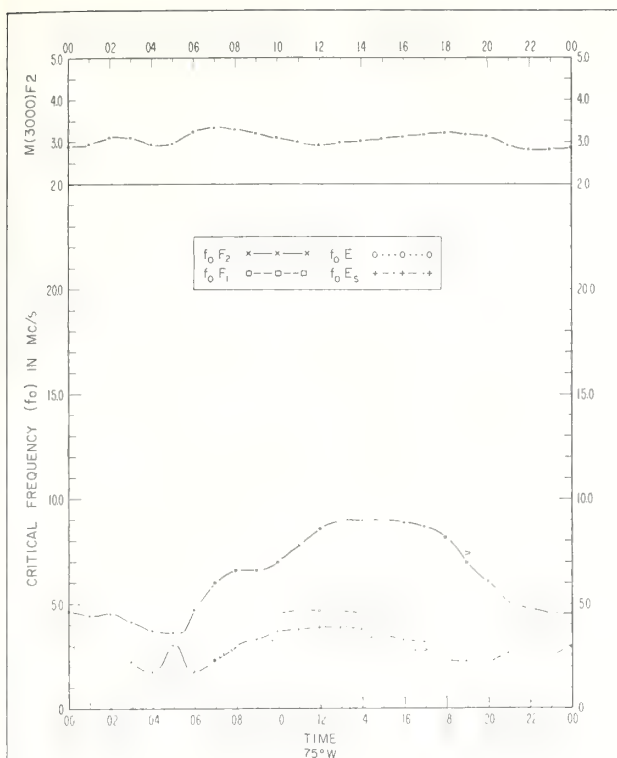


Fig. 77 GRAND BAHAMA I.  
26.6°N, 78.2°W

APRIL 1962

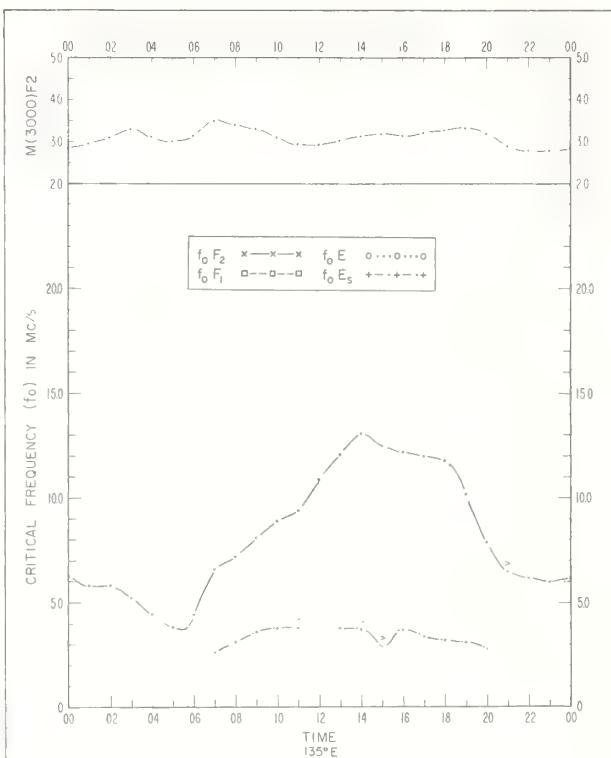


Fig. 78 OKINAWA I.  
26.3°N, 127.8°E

APRIL 1962

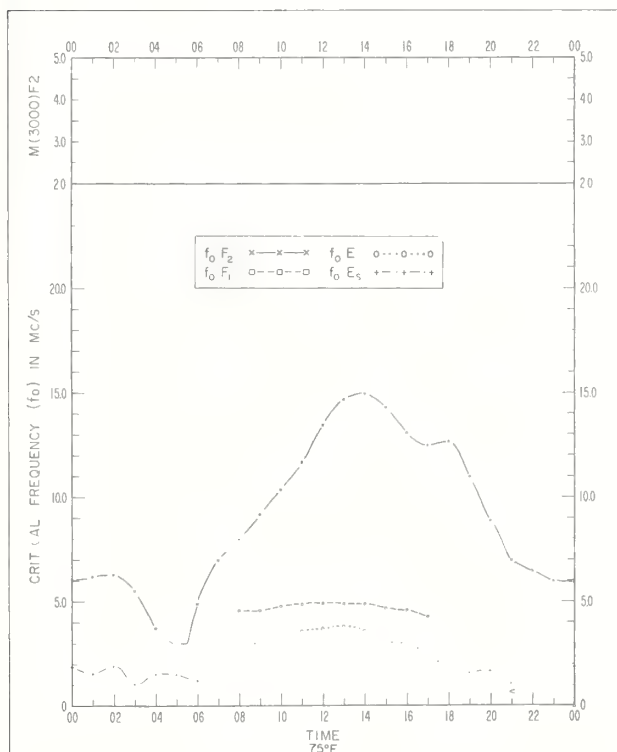


Fig. 79 AHMEDABAD, INDIA  
23.0°N, 72.6°E

APRIL 1962

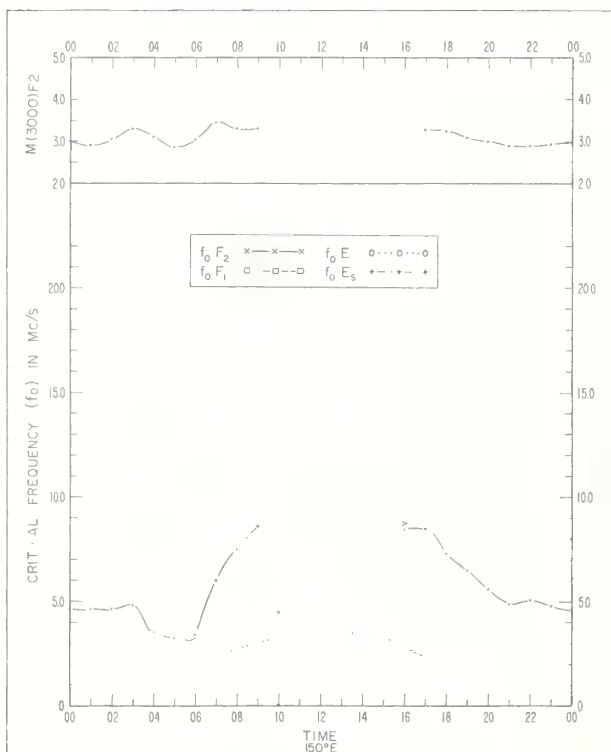
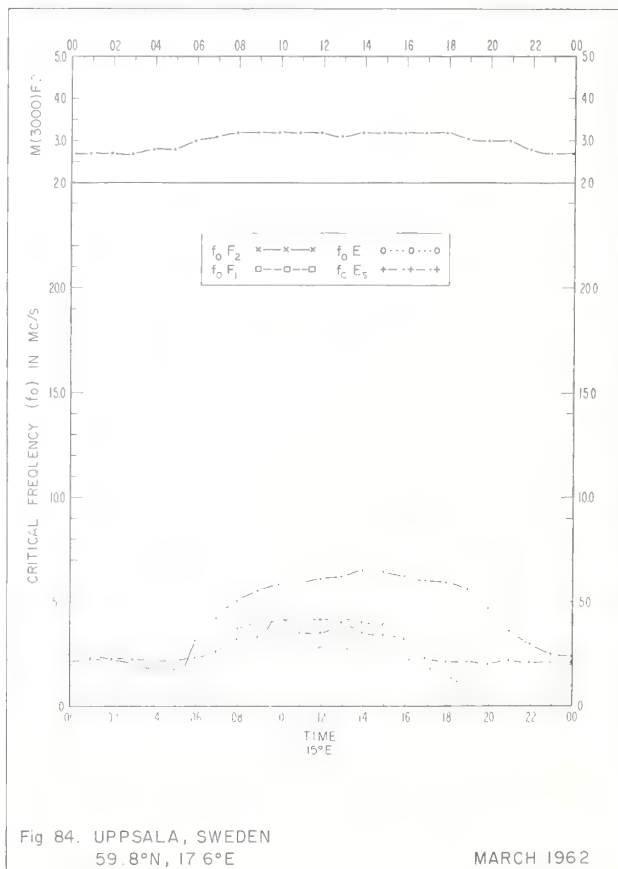
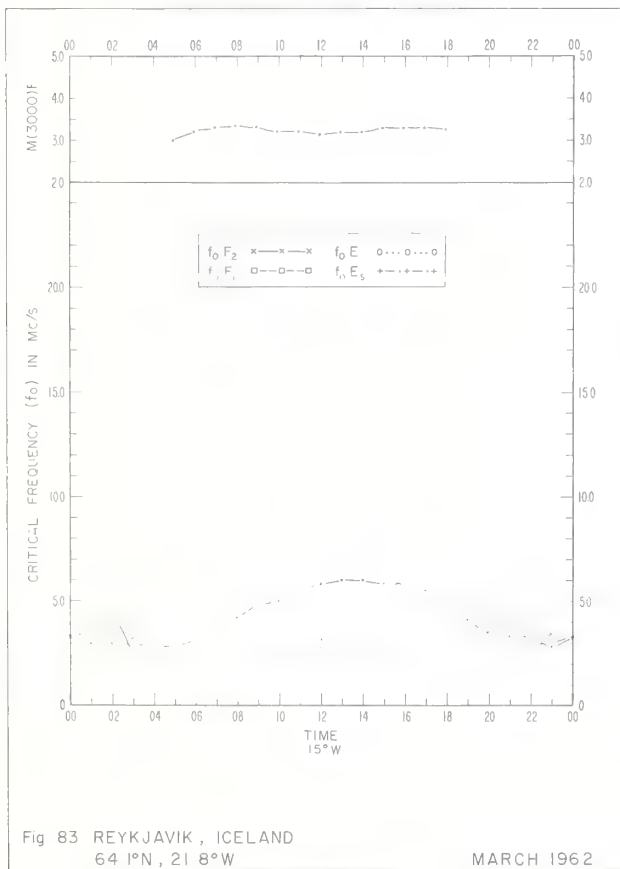
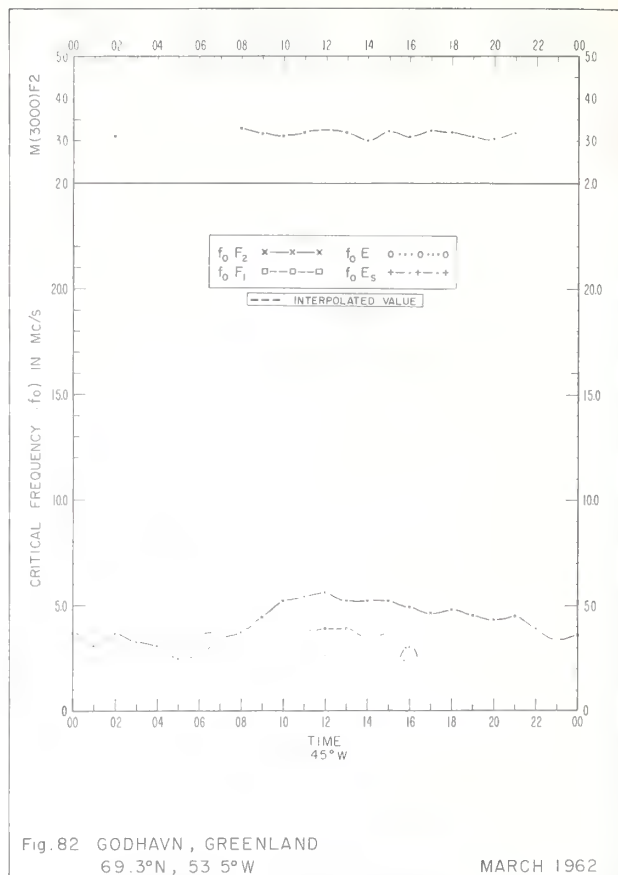
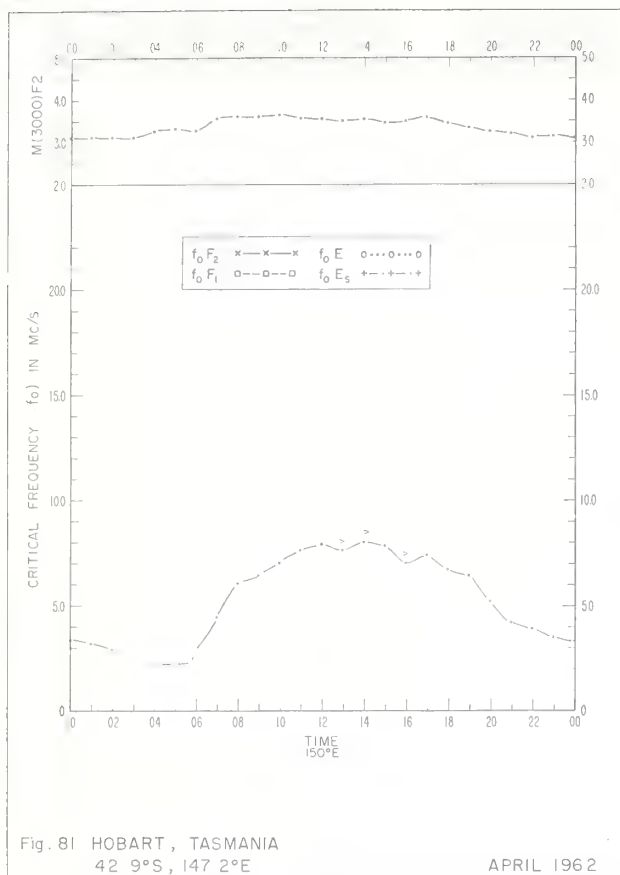


Fig. 80 TOWNSVILLE, AUSTRALIA  
19.3°S, 146.7°E

APRIL 1962



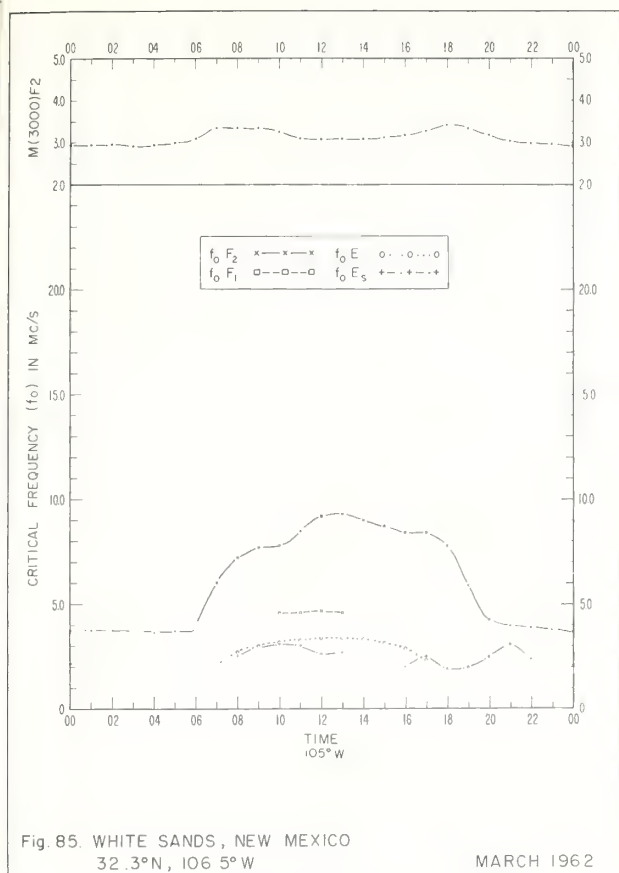


Fig. 85. WHITE SANDS, NEW MEXICO  
32.3°N, 106.5°W

MARCH 1962

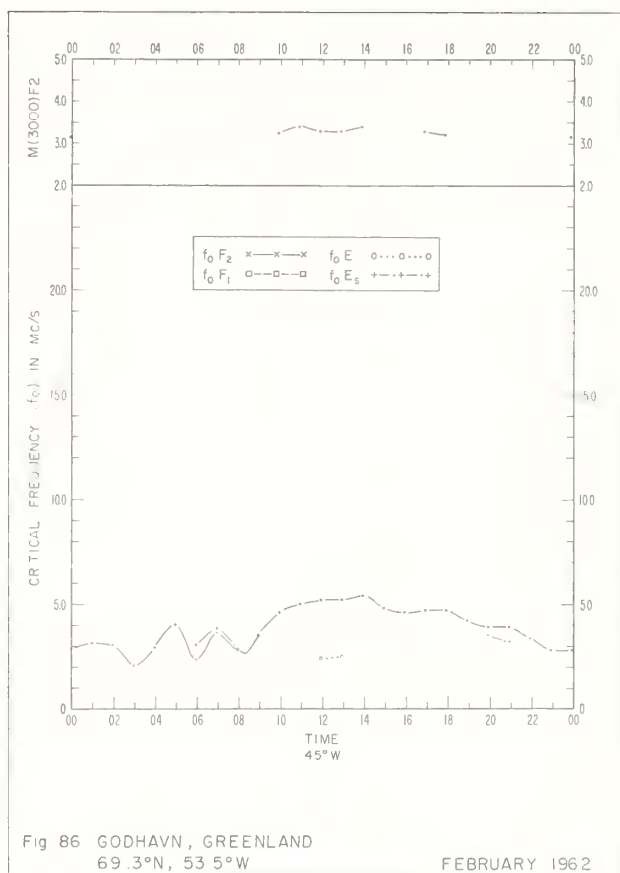


Fig. 86. GODHAVN, GREENLAND  
69.3°N, 53.5°W

FEBRUARY 1962

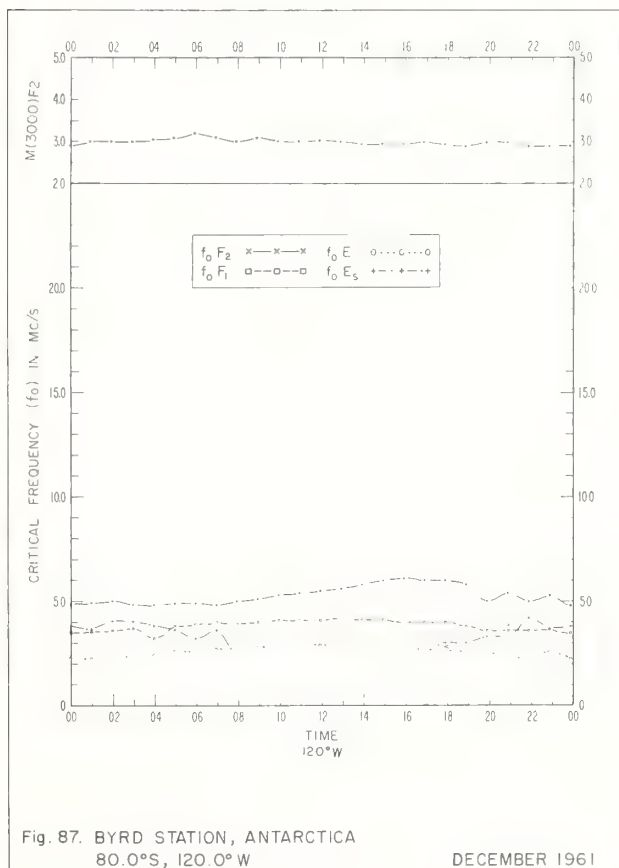


Fig. 87. BYRD STATION, ANTARCTICA  
80.0°S, 120.0°W

DECEMBER 1961

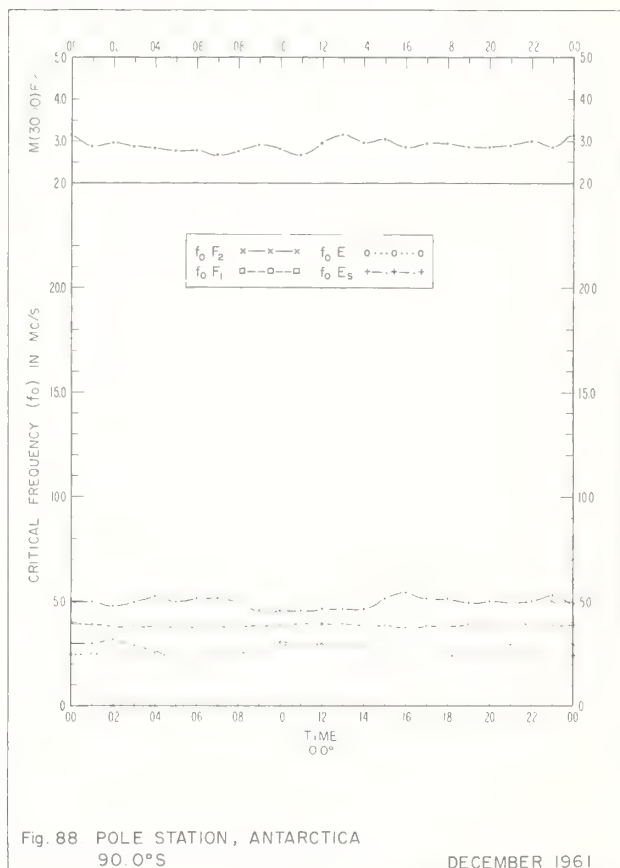


Fig. 88. POLE STATION, ANTARCTICA  
90.0°S

DECEMBER 1961

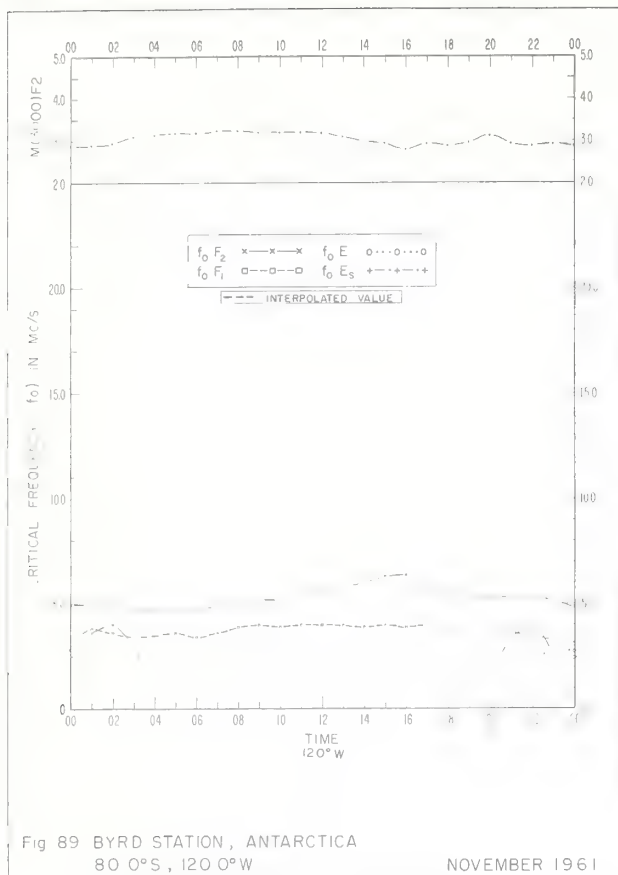


Fig 89 BYRD STATION, ANTARCTICA  
80°S, 120°W

NOVEMBER 1961

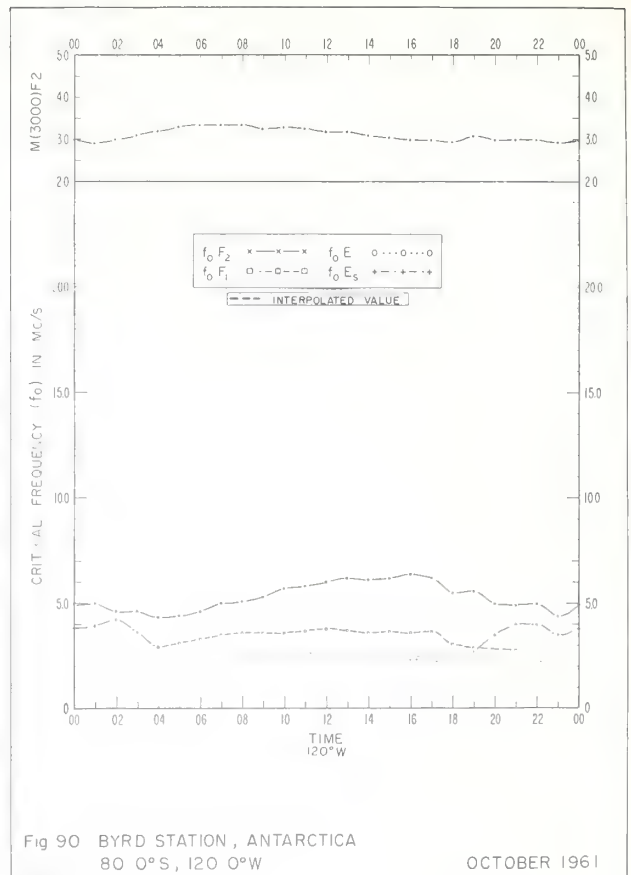


Fig 90 BYRD STATION, ANTARCTICA  
80°S, 120°W

OCTOBER 1961

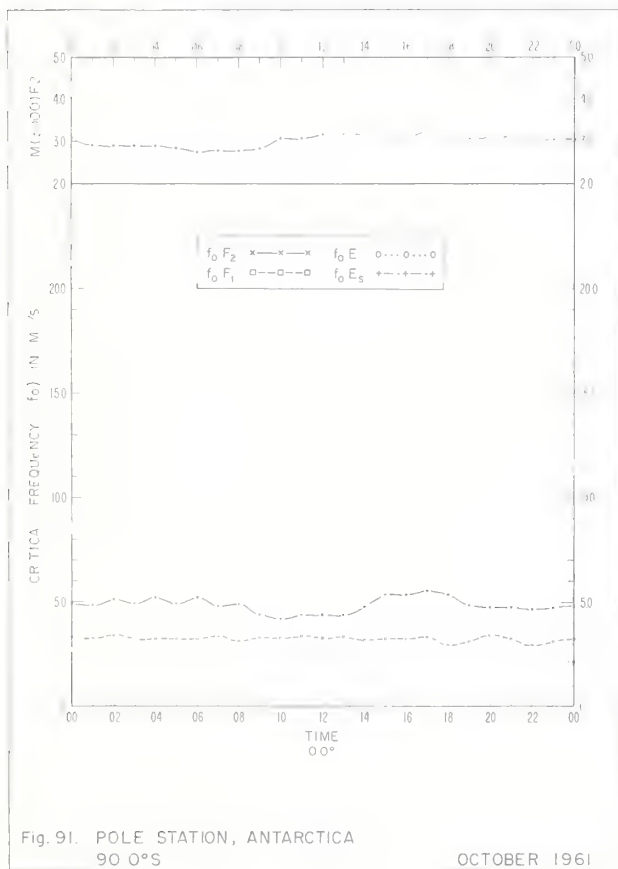


Fig. 91. POLE STATION, ANTARCTICA  
90°S

OCTOBER 1961

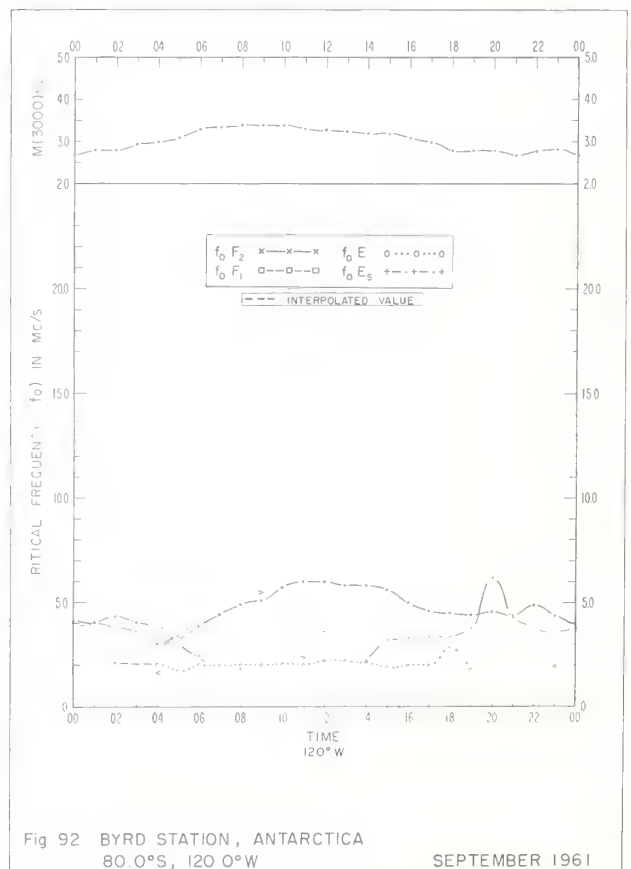
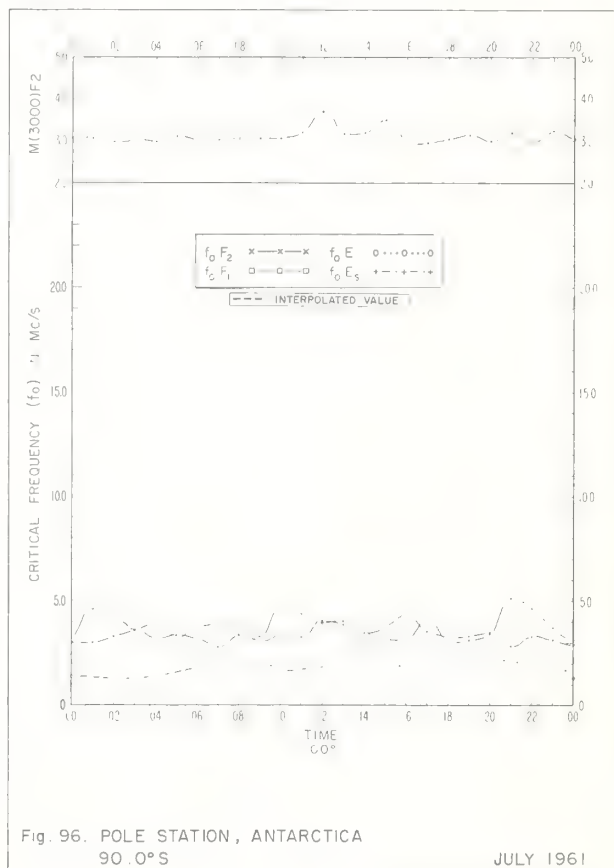
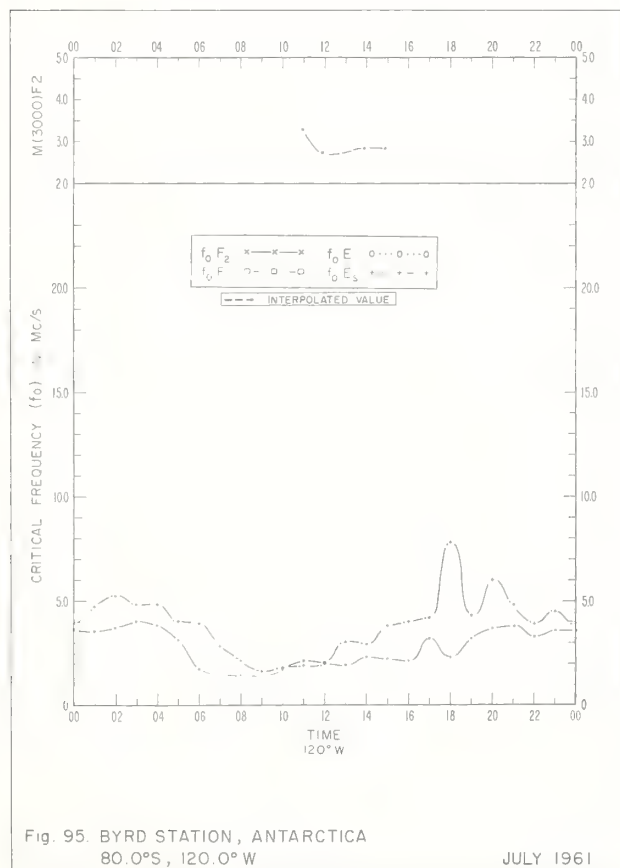
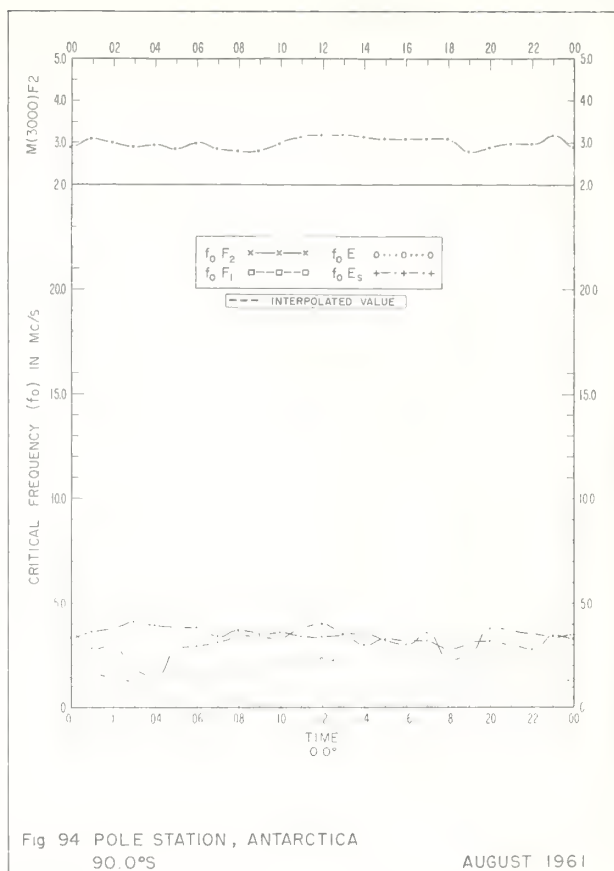
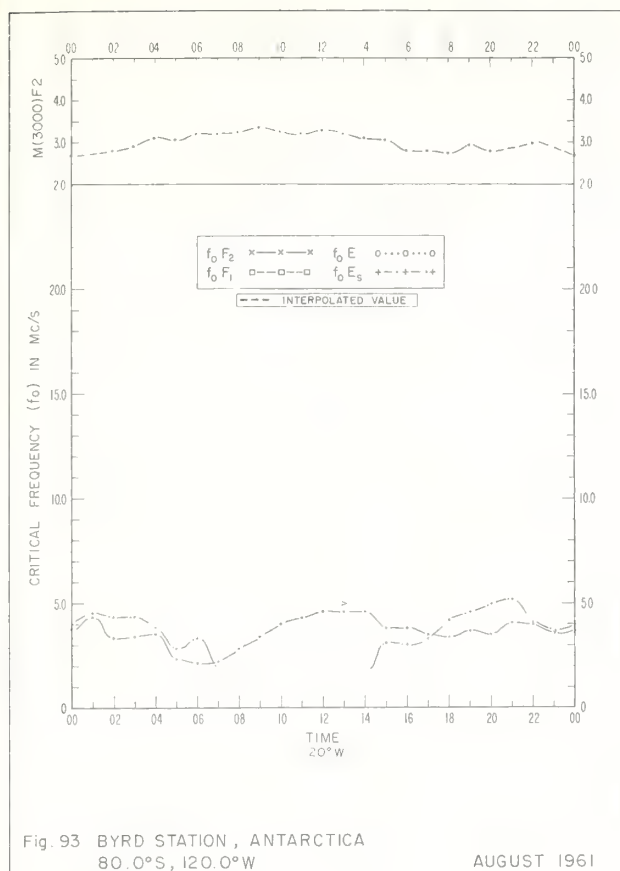


Fig 92 BYRD STATION, ANTARCTICA  
80°S, 120°W

SEPTEMBER 1961





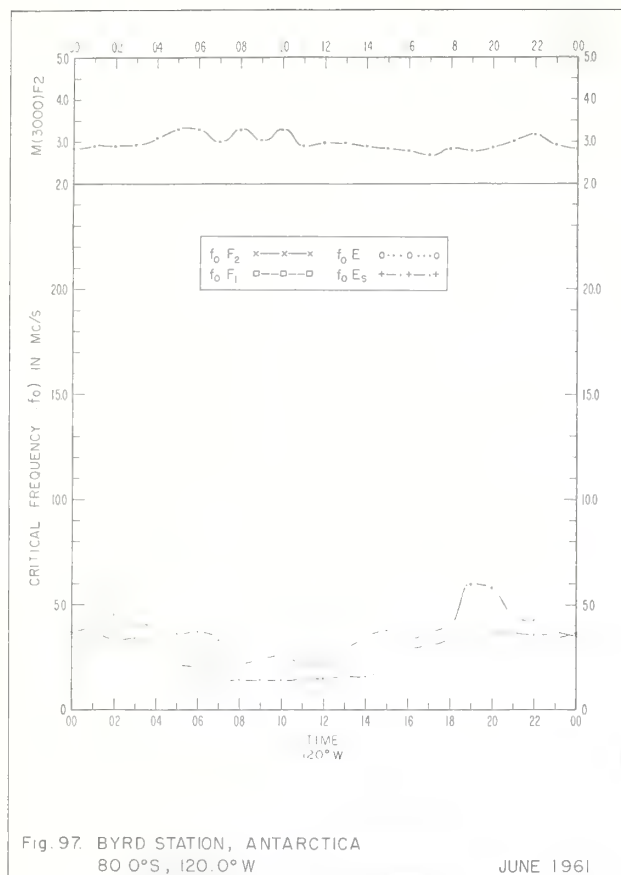


Fig. 97. BYRD STATION, ANTARCTICA  
80.0°S, 120.0°W

JUNE 1961

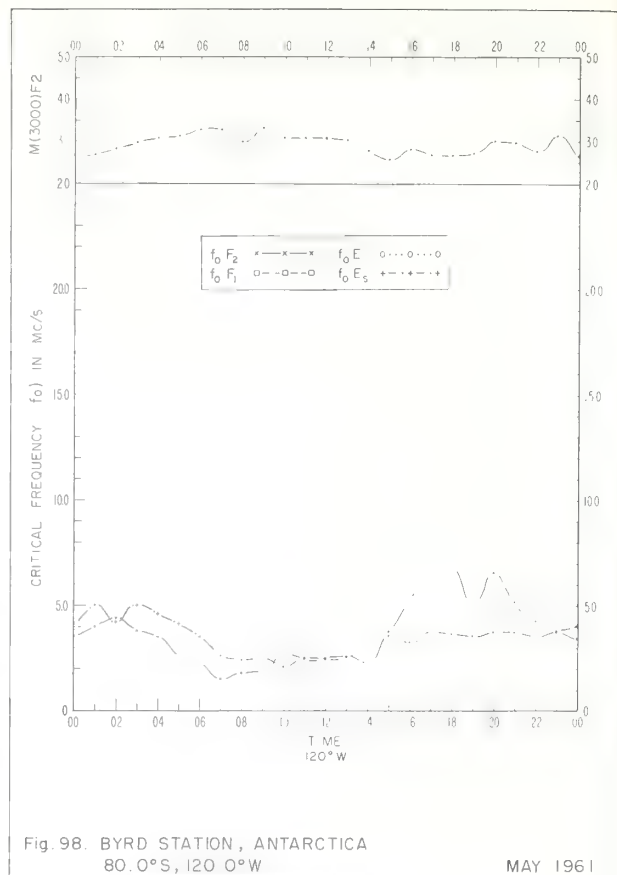


Fig. 98. BYRD STATION, ANTARCTICA  
80.0°S, 120.0°W

MAY 1961

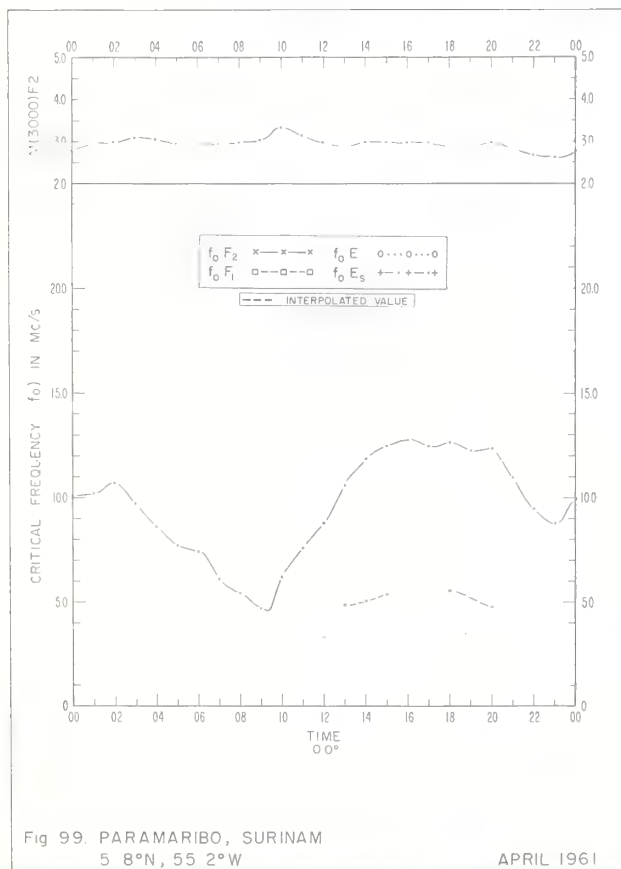


Fig. 99. PARAMARIBO, SURINAM  
5°N, 55°W

APRIL 1961

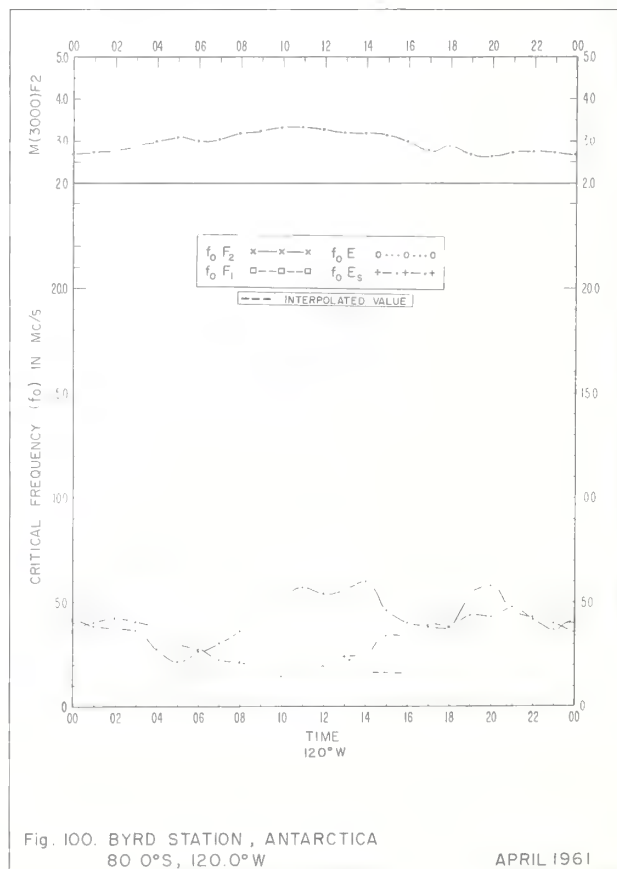


Fig. 100. BYRD STATION, ANTARCTICA  
80.0°S, 120.0°W

APRIL 1961

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### Catalog of Data.

A catalog of records and data on file at the U.S. IGY World Data Center A for Airglow and Ionosphere, Boulder Laboratories, National Bureau of Standards, Boulder, Colorado, which includes a fee schedule to cover the cost of supplying copies, is available upon request.

CRPL-F (Part A), "Ionospheric Data."

CRPL-F (Part B), "Solar Geophysical Data."

These monthly bulletins have limited distribution and are sent, in general, only to those individuals and scientific organizations that collaborate in the exchange of ionospheric, solar, geomagnetic, or other radio propagation data of interest to the CRPL. Others may purchase copies of the same data from the U.S. IGY World Data Center A for Airglow and Ionosphere, National Bureau of Standards, Boulder, Colorado.

### "Ionospheric Predictions."

This series of publications is issued monthly, three months in advance, as an aid in determining the best sky-wave frequencies for high frequency communications over any transmission path, at any time of day for average conditions for the month.

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C. Price 15 cents. Annual subscription (12 issues) \$1.50 (50 cents additional for foreign mailing).

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National Bureau of Standards Handbook 90, "Handbook for CRPL Ionospheric Predictions Based on Numerical Methods of Mapping." Price 40 cents.

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